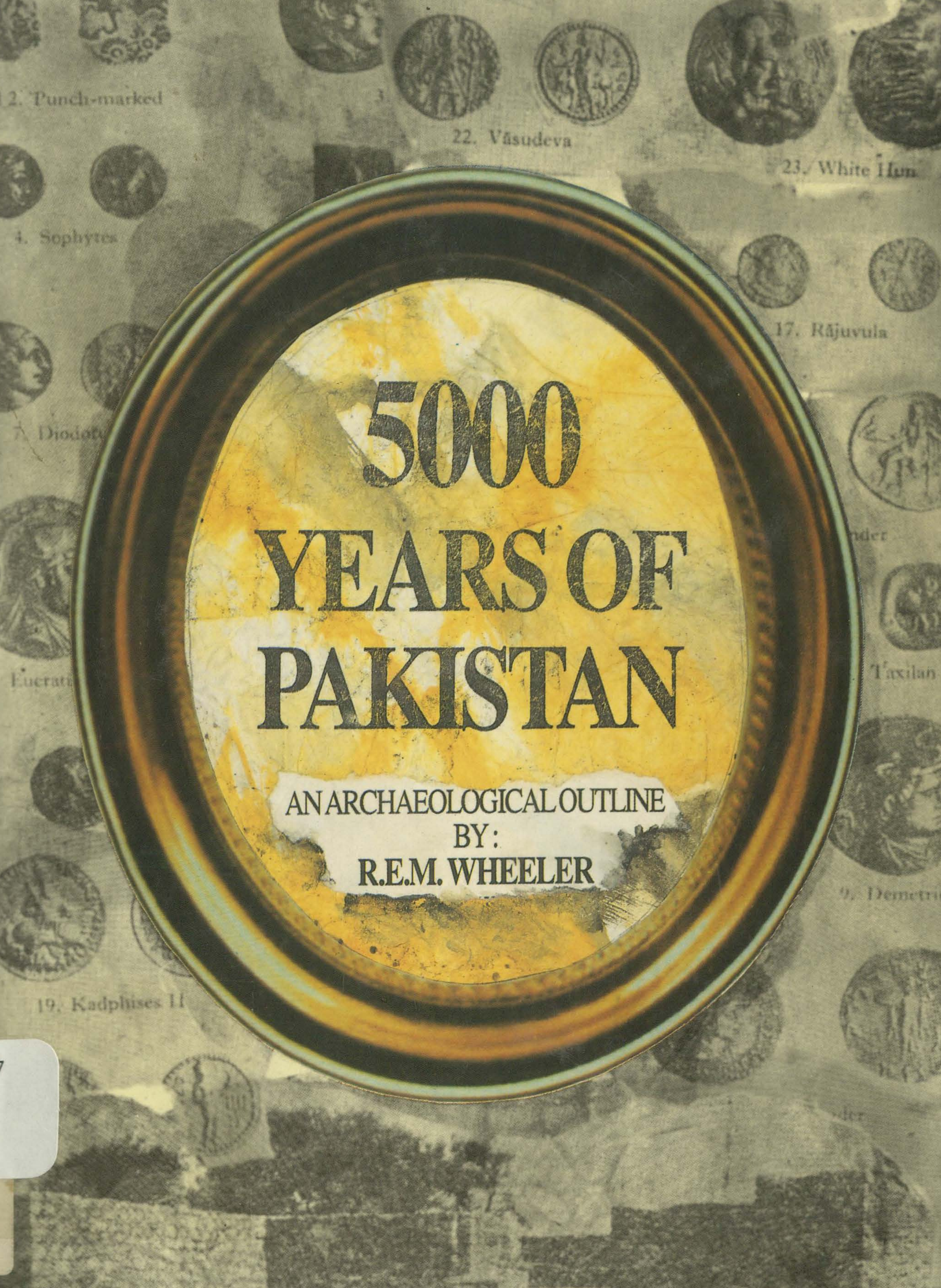
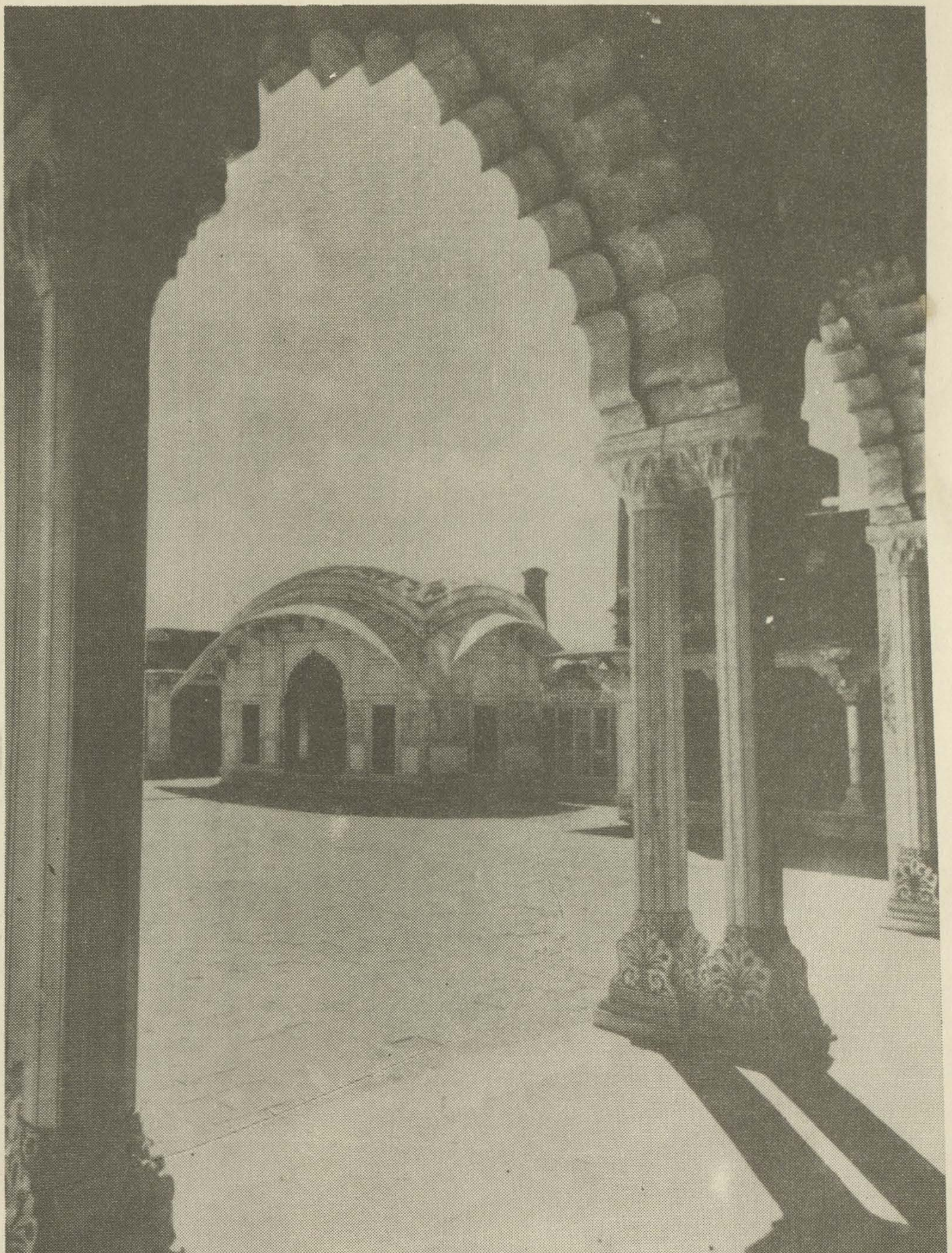

2. Punch-marked
22. Vāsudeva
23. White Hun
4. Sophytes
17. Rājuvula
5000
YEARS OF
PAKISTAN
AN ARCHAEOLOGICAL OUTLINE
BY:
R.E.M. WHEELER
19. Kadphises II



LAHORE FORT: THE "NAULAKAHA" SEEN FROM THE SHĪSH MAHAL (HALL OF MIRRORS). *See p. 80*

About A.D. 1632.

FIVE THOUSAND YEARS OF PAKISTAN

FIVE THOUSAND YEARS OF PAKISTAN

AN ARCHAEOLOGICAL OUTLINE

BY

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WITH A PREFACE BY THE HON'BLE FAZLUR RAHMAN

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PREFACE

THIS book has been compiled for the purpose of presenting both to Pakistan and to the outside world a brief sketch of the imposing material heritage of Pakistan in the form of ancient buildings, sites and cultures prior to the death of the Emperor Aurangzēb in A.D. 1707. In quantity, in range and in quality, this heritage is one of which the new Dominion may be justly proud. It includes one of the great civilizations of Asia—the Indus Civilization of the third and second millennia B.C.; it shares with the borderland of Afghanistan the primary glory of that remarkable and individual Buddhist art which flowered there in and after the second century A.D.; the lively spontaneity of East Bengal endowed it in the eighth and ninth centuries A.D. with a school of vivid terracotta sculpture unapproached, of its kind, south of the Himālayas. Its achievements after the arrival of Islam, extending from the tiled mosques of Tatta to the Moghul fortress of Lahore and the *Chhoṭā Sonā Masjid* of Gaūr, are more widely familiar. The story of these things is worth the telling and re-telling, in every school and university of the land. The heritage of Pakistan must be kept alive if the future is to grow strongly and healthily out of it. It will be no good to tie new leaves on to a dead tree.

In the preparation of this book, Dr. Wheeler has asked me to acknowledge the help of the Archaeological Department of Pakistan and, in particular, the notes supplied by Mr. A. H. Dani with reference to East Pakistan; together with the kindness of Professor A. B. A. Haleem, Vice-Chancellor of Sind University, in reading through the West Pakistan section, and of Professor Stuart Piggott in permitting the use of unpublished material in chapters 2 and 4. Lastly, all gratitude is due to the Royal India and Pakistan Society which is associated with the Government of Pakistan in the work of production.

FAZLUR RAHMAN,
Minister of Commerce and Education, Government of Pakistan

KARACHI, 1949

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ILLUSTRATIONS

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INTRODUCTORY

THE title of this little book is a wilful paradox but contains a fundamental truth. Pakistan is a new Islamic state but is, nevertheless, like its older neighbours, a product of historical processes of which Islam itself is only the most recent and emphatic. In reviewing those processes, the modern historian and archaeologist turns first to geography and geology. How far did nature anticipate and control the activities of man which have culminated in the new Dominion ?

In West Pakistan the answer is not difficult. The natural boundaries are the Arabian Sea in the south-west, the Baluchistan and Himālayan mountains in the west and north, and the *thar* or desert in the south-east. Only towards the east, between the desert and the Himālayas, is there an open fertile tract, upwards of two hundred miles wide, where the great plains of northern India continue unbroken into the West Punjab. There alone are boundaries indeterminate in a geographical sense, and there alone is man completely arbiter of his destiny. Otherwise, West Pakistan is marked out as an integral unit no less by nature than by man.

Its backbone is the river-system of the Indus, which, aided by artifice, is capable of fertilizing vast tracts of good alluvial soil. The flanking hills rise sharply from the river-plain to the Irano-Afghan plateau, and their outline still delimits, as for many centuries it has delimited, two essentially different social systems: the semi-mobile peoples of the heights from the settled population of the vale. The two societies, however, are not without common interests. Seasonal movement from the upland to the lowland is still a factor in the social structure of the region, as when the Baluch hill-folk come down with their tents and camels and flocks in the winter to trade their labour with the plainsmen. And more than 4,000 years ago there is already evidence for the intrusion of a variety of little hill-communities into a strikingly uniform lowland civilization.

But apart from this local interaction there has been at all times a considerable long-distance traffic, whether peaceful or warlike, between the lowland of what is now Pakistan and the hinterland of Asia. In the north, caravans or invaders have converged on the vale of Peshāwar from three directions: from the Indus valley, from the North Indian plains, and from Central or Western Asia. Nor is that all. Supplementary routes approach the Indus via Quetta and Kalāt and along the coastal tracts beside the Arabian sea; whilst a considerable and important maritime trade with the West has debouched upon the Indus delta and there fed, and been fed by, the Indus valley route. The far-reaching effect of all this traffic in the diffusion not only of goods but also of ideas and populations will be considered in later chapters.

The agricultural development of the Indus region in modern times has been impeded by the meagreness of the rainfall. In contrast, the abundance of ancient sites, representing a widespread food-producing population, seems to imply that formerly the climate was appreciably moister; and as visual evidence of this we have the lifelike representations of jungle animals—tiger, elephant, rhinoceros, water-buffalo—on the seals of the great prehistoric Indus Civilization (below, p. 29), together with actual bones of some of them. Further, the use of millions of baked bricks by that Civilization implies that anciently these were needed, in preference to unbaked mud-bricks, to withstand the rigours of a relatively rainy climate,

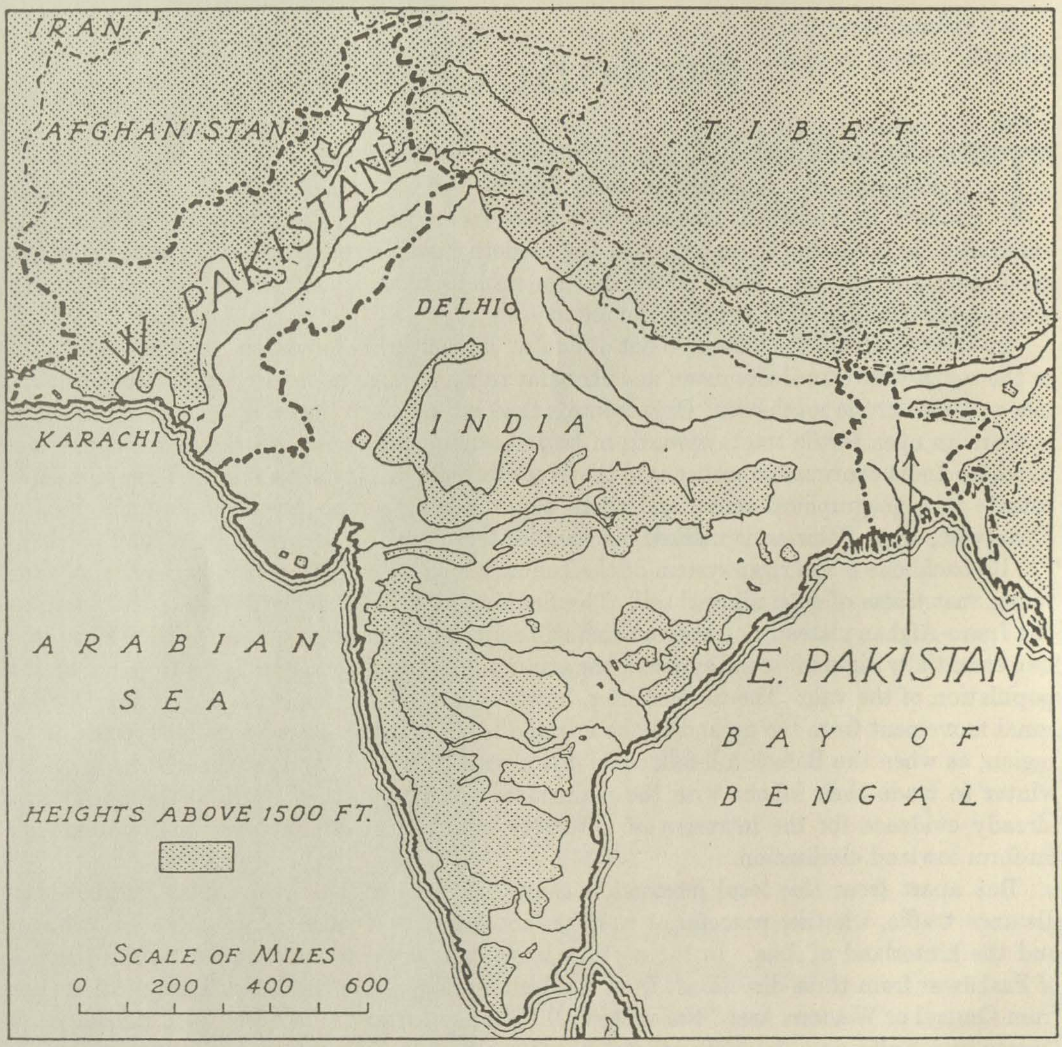


Fig. 1

and their very existence indicates a great abundance of firewood for their baking. It has been inferred that the cyclones, which at one time watered considerable tracts of North Africa, Mesopotamia and northern India, have moved northward and thus changed the climate from damp to dry. Alternatively, it has been supposed that the area of the south-western monsoon at one time included the Indus valley but has shifted eastwards within the last two or three thousand years.

One or other of these explanations is likely enough, but is probably not the whole truth. Man himself is doubtless responsible in part for the change. The deliberate destruction of ancient towns and villages by their human enemies, and the obliteration of their crops and trees, must itself have reduced the precipitation of rain and increased the salinity and sourness of the soil, gradually converting one-time tillage into semi-desert. Furthermore, the removal

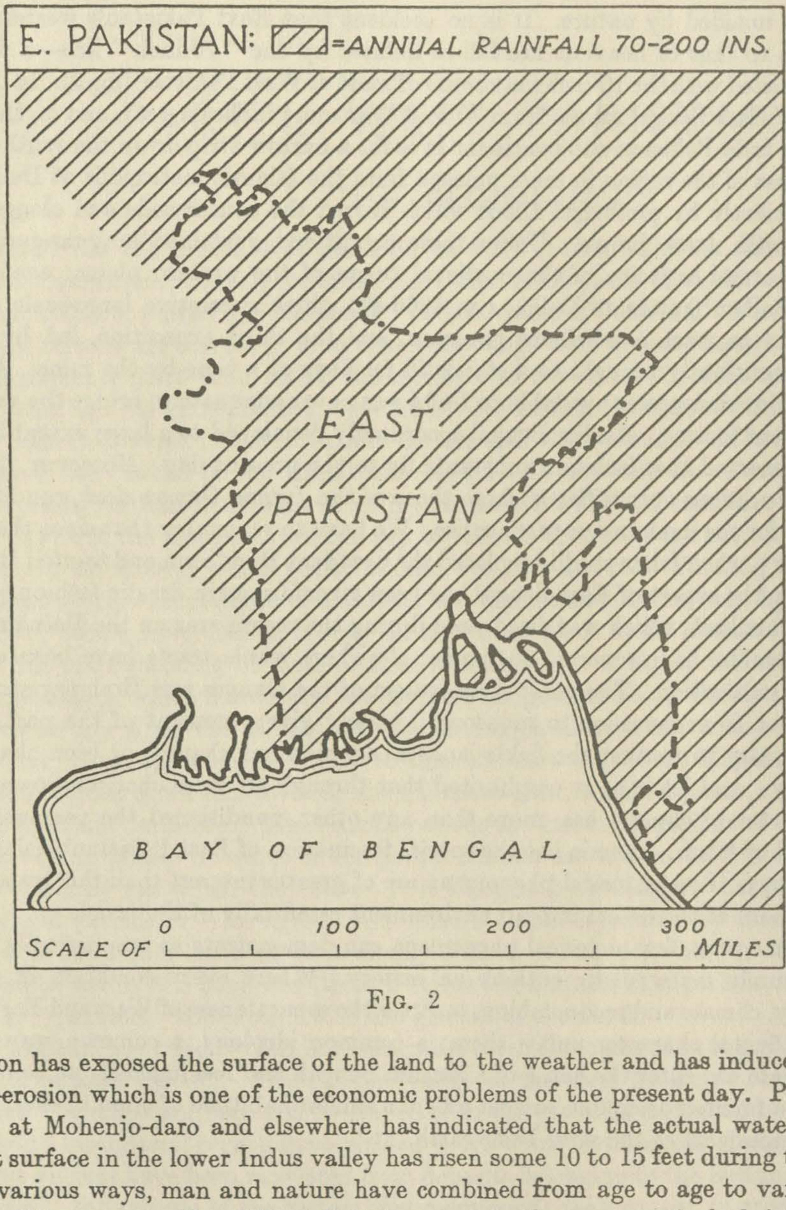


FIG. 2

of vegetation has exposed the surface of the land to the weather and has induced the wides-spread soil-erosion which is one of the economic problems of the present day. Paradoxically, excavation at Mohenjo-daro and elsewhere has indicated that the actual water-level below the present surface in the lower Indus valley has risen some 10 to 15 feet during the last 4,000 years. In various ways, man and nature have combined from age to age to vary materially the aspect of the countryside of West Pakistan even in the comparatively brief period with which this survey mainly deals.

Similarly the visitor to East Pakistan (East Bengal) can only reconstruct the history and archaeology of that region with a constant regard to climate and landscape. He will find there, however, a more difficult and subtle problem than in the western part of the Dominion. Save for a distance of 70 miles, where the new frontier follows the Ganges, the partition is based on grounds other than geographical ones. Here human ideas and beliefs rather than natural obstacles have been the determining factor. But, even so, the individuality of East Pakistan

has not been unaided by nature. It is no accident that East Pakistan's western boundary approximates to that of heaviest rainfall as defined by the " 70-inch " line—a figure which may be contrasted with the 10-inch maximum of most of West Pakistan (fig. 2). In other words, the rainfall of East Bengal ranges from 70 to 200 or more inches a year, and is, therefore, the largest in the Indo-Pakistan sub-continent save for a narrow strip down the south-west coast. The remoteness of the region in mere mileage from the Islamic metropolis at Delhi was thus magnified anciently by prolonged floods which barred the countryside and clogged its communications with dense jungle. Under these conditions, sustained long-range control was beyond the normal capacity of the medieval rulers of the western plains; even under the determined Balban (sultān of Delhi, A.D. 1266-87), three successive large-scale expeditions were necessary to reach a rebellious governor, and the third expedition, led by the sultān himself, was constantly brought to a standstill for days at a time by the rains. At the same time the Muslim man-power available to Delhi was never adequate to bridge the vast gap on a more permanent footing. Muslim Bengal accordingly developed to a large extent in isolation, and it has preserved that isolation substantially to the present day. Moreover, it developed under local conditions very different from those of the Jumna-Ganges *doab*, conditions which it is not easy for the modern eye to visualize. We have to remember that since the end of the twelfth century, when Islam readily replaced the decadent Buddhism and tainted Brahmanism of these parts, the aspect of East Bengal has been transformed in drastic fashion. Cities such as the Pāla Paṭṭikerā, which was discovered during the recent war on the Maināmatī-Lālmāi ridge near Comilla, have reverted to jungle; elsewhere whole tracts have been cleared and brought into cultivation. The great river-system of the Ganges and Brahmaputra varies its multiple course from monsoon to monsoon. At any given moment of the past, deliberate effort is necessary to recover the fickle landscape which has shaped, or been shaped by, its varied history. And let it be re-emphasized that through all these changes, down to modern times, the factor of climate has, more than any other, conditioned the personality of this distant island of Islam. Therein lies the special fascination of East Pakistan's Islamic history and archaeology. Few historical phenomena are of greater interest than this transplantation of a culture born of the desert into an environment essentially of the jungle.

At the same time, few historical phenomena can demonstrate so emphatically the limitations of a purely materialistic outlook on history. Where every condition of geography, physiography, climate and race combines to stress the separateness of West and East Pakistan, one transcendental character unites them: a common ideology, a common way of life. A Muslim Punjabi can enter the house of a Muslim Bengali and feel instantly at home. He is in the midst of a familiar discipline, amidst folk of a similar habitude of mind. Desert and jungle are after all accidents of the same basic earth.

PART I. WEST PAKISTAN

I. THE BEGINNING

ALTHOUGH the presence of mankind in what is now Pakistan cannot yet be traced backwards continuously for much more than 5,000 years, it would have been in a sense excusable to entitle this handbook " 500,000 years of Pakistan." For, if the calculations of modern science are correct, it is to that remote age that we may ascribe the earliest man-made implements discovered within the territory of the state. Of their makers here half-a-million years ago we know, indeed, very little. No human skeleton of this distant antiquity has yet been discovered in Pakistan, and certain still older remains of fossil anthropoid apes which have been found in the Himālayan foothills do not help us. True, these fossil-apes exhibit certain features more akin to man than does the skeletal structure of any ape of the present day, but the most that we can say of them is that they are remote derivatives from the common stock from which primeval man was also derived. Pending further discovery, the earliest human inhabitants of Pakistan are represented for us only by crudely-chipped stone tools, which, nevertheless, occupy an important place in the archaeology of Asia.

The full understanding of these ancient relics involves a highly technical study of their geological setting, which lies outside the scope of the present book. Suffice it to say that they belong to an age when the climate and the landscape differed materially from those of the present day; to an age when from time to time the snow-cap of the Himālayas spread downwards under arctic conditions towards the plains and then, in milder phase, retreated once more into the highland fastnesses. These arctic periods are known as periods of " glaciation," and the intervening phases of warm or temperate climate are known as " interglacial periods." During the long era which they cover, it is thought by geologists that there were five of these glacial periods or " ice ages " in Northern India, separated by four interglacials. A comparable succession has been more closely defined in Europe, whilst in the tropics both of India and of Africa it is supposed (though this is less certain) that periods of intense rainfall, known as " pluvials," correspond with the glacials of the north.

In Pakistan, the region which has been most carefully explored in regard to these matters, is the Rawalpindi district. There in the valley of the river Sohan or Soan, certain of the " terraces " which have been cut by the river in the material deposited by the melting ice-field during interglacial phases have yielded rough stone implements of more than one kind. The most ancient have been recovered from deposits belonging to the beginning of the Second or " Great " Interglacial of the system just mentioned; they consist of crude flakes (pl. IIA) struck from large pebbles of quartzite and are often, to the untrained eye, indistinguishable from the works of nature. Archaeologists have named them " Pre-Sohan," to distinguish them from the better-defined implements which were produced later in and after the same geological phase and are found in several river-terraces and other deposits in northern Pakistan.

These later implements represent a very long period of time, perhaps from 400,000 to 200,000 years ago. Age after age very slowly improved or modified their workmanship, but they are sufficiently homogeneous to justify their grouping in terms of a single industry, to

which archaeologists have given the name " Sohan Culture." This has been divided into an early phase and a late one, the latter of which persisted into the Third or even the Fourth Interglacial. The typical tool has been described as a " chopper " (pl. IIA): in its most primitive form it is struck by means of a stone hammer from a rounded pebble without the preparation of the usual little " platform " from which such flaking is commonly effected, and often has a steep scalloped cutting-edge worked on one side only. Other choppers are made from thick flakes with a high-angled striking platform and are in some degree comparable with the earliest (so-called " Clactonian ") flake-implements of Europe, though the significance of this resemblance is doubtful. Somewhat similar " chopper " industries occur in Burma, Malay, Java and China, and the whole may perhaps be regarded as a distinctively South and East Asian group having little or no relationship with the West. In the Late Sohan period there was a marked improvement in technique, particularly in the trimming of the " core " or primary lump of stone before the utile flake was struck off it.

Alongside the flake " chopper " industry of the Sohan region is found, though in relatively small quantity, another class of tool of radically different kind. In this type, the implement is shaped on the core itself, not a derivative flake, and the difference is an important one. The characteristic core-tool is the so-called " hand-axe " (pl. IIB), a pear-shaped or oval implement formed by whittling down the rough original stone by means of a hammer of stone, wood or horn until the desired shape and a continuous cutting-edge are achieved. The hand-axe occurs freely in South India, and the industry to which it belongs has there been named the " Madras " Industry. It is similar to the so-called " Acheul " Industry of Western Europe, Arabia and Africa, but any close equation between the various hand-axe zones is still largely theoretical. It is worth noting that comparable implements have been made by the modern aborigines of Australia. In the Sohan and Indus system these implements are found occasionally at all stages of the Sohan Culture, notably at Chauntra in the Punjab, but those from the Late Sohan phase are of more developed form and were probably shaped by means of wooden rather than stone hammers, as were the later hand-axes of the West.

Of what sort were the makers of these simple stone tools, and what was their way of life? At present we do not know. Not only have we failed to discover their skeletons, but all that equipment of wood, bone, skins and fibre, which may be assumed to have been included in their culture, has vanished likewise. In Europe and elsewhere, it has been supposed that the makers of core-tools were men of an aspect not unlike our own, whilst the makers of flake-tools, on the other hand, were more primitive-looking (or degenerate) collaterals. Before we apply these alien analogies to Pakistan, it may be hoped that Pakistan archaeologists and geologists will combine in a search amongst the river-terraces of the West Punjab and the Frontier Province for the first-hand evidence which certainly awaits them there. The discovery of the bones of one of the ancient tool-makers of the Sohan would attract a world-wide interest and would help to fill a very large gap in our knowledge of our earliest forerunners.

2. THE PREHISTORIC VILLAGES OF THE WESTERN HILLS

IT is assumed that the primitive folk who, as described in the previous chapter, long ages ago made stone " choppers " and " hand-axes " beside the rivers of the Punjab were hunters and food-gatherers, with neither flocks nor fields. When we come, however, to the beginning of the continuous story of man in Pakistan, some 5,000 years ago, we find him

already established, in however rudimentary a fashion, both as herdsmen and as farmer. He was living in permanent villages set in the little valleys amongst the hills or occasionally on the great river-plain itself. He had cattle, sheep and goats and even horses, although these last do not appear to have been numerous until a later period. He grew barley and other crops and, within unambitious limits, won an adequate living for himself and his family under conditions which, even with a moister climate than today, can never have been easy. It must partly have been the difficulty of producing the surplus necessary for commerce that restricted his interests mainly to his own immediate surroundings and limited his contacts with his neighbours. Certain it is that these villages or village-groups present a baffling variety of local fashion in their craftsmanship, and only a few of their individual features can be touched on here.

And yet this very diversity presents a challenge to Pakistan archaeologists. Hitherto, the investigation of this widespread village-life has been fragmentary and unsystematic. Under the new conditions of the present time it is worthy of more methodical attention. For, imdedded in it and awaiting rediscovery are the clues to important human relationships that will one day enable us to reconstruct the true position of Pakistan in that vital phase of growth and experiment which culminated in the great civilizations of ancient Mesopotamia on the one hand and of the Indus valley on the other.

To the Indus Civilization we shall come in the next chapter. Meanwhile, the busy village-life which anticipated and, in some measure not yet clear, contributed to it demands a summary survey. Geographically, its focus is the Iranian Plateau, of which the Baluchistan Hills form the rugged eastern escarpment.

The Iranian Plateau is, on an average, 3,000-5,000 feet above the sea-level. It consists of stretches of somewhat stony plain, broken by sharp, jagged mountain-ranges rising commonly from 2,000-4,000 feet above it and, at suitable seasons, providing useful local watersheds. Since the Middle Ages and perhaps much earlier, it has been customary to tap the subterranean water at the base of these mountains for irrigation by underground canals cut from a succession of vertical shafts, and this *karez* or *kanat* system can be seen within the boundaries of Pakistan near Quetta and elsewhere. In the spring, when the melting snows flood the lower lands, the plateau leaps to life, and its fruits and crops turn it momentarily into a land of plenty. There is thus every inducement to the peasant-nucleus of the population to remain and develop parochially within its own territories. At the same time, alongside this stable element is the restless life of the neighbouring hill-folk with their flocks and their seasonal migrations between upland and lowland. The human occupants of this great tract thus constitute a mingling of vagrants of little cultural importance and a farming peasantry of greater interest, living in hill-divided settlements.

In these circumstances it is not surprising to find that, between 5000 and 3000 B.C. and later, the Plateau-communities, whilst sharing a fairly uniform standard of equipment and social economy, presented in detail that complex variety to which reference has already been made. Above all, their domestic and funerary pottery differed considerably in skill and character from place to place; and it is primarily, therefore, by a careful and somewhat tedious classification of their pottery that the archaeologist is able to rediscover something of their occasional movements and interrelationships. Indeed, in no plase of human society is it truer to describe pottery as the " alphabet " of archaeology.

At the beginning of this period, before 4000 B.C., it is probable that all these various Plateau-groups were still living in the Stone Age: *i.e.* they had not yet acquired a sufficient

knowledge of utile metals such as copper and tin to use them, rather than stone, for the manufacture of tools and weapons. By the end of the period, by 3000 B.C., both copper and tin were known, and their alloy, bronze, was sometimes employed: society was passing into the so-called Bronze Age. Iron was still unknown. Even considerably later than 3000 B.C., however, many communities were still too poor or too unenterprising to make any extensive use of copper or bronze, and the great majority of their implements remained of the traditional stone, wood, bone or horn.

To these smaller communities we shall return. First, it is necessary to refer to certain major developments which form an exception to what has just been said as to the general stability and provincialism of the peasant societies of the Plateau. Somewhere towards the middle of the fourth millennium B.C. there occurred one of those folk-movements which from time to time, and from a variety of causes, are liable to affect even a relatively static population, and to set it in motion. At that time a geographical change was taking place to the west of the Plateau, in the vicinity of Fars; what is now the lower valley of the Tigris-Euphrates system was gradually silting up and offering tracts of fertile alluvium where previously sea and salting had prevailed. Into this promised land, it would appear, some of the Plateau-folk, under some unknown stimulus, found their way. Their relics have been discovered near the Plateau at Sūsā in south-western Iran; and at Ur, al'Ubaid and Eridū in Iraq, traces of them and of the reed huts in which they lived have been found at the lowest marshy level. At first, the new conditions must have been difficult and irksome to a people accustomed to the dry, stony highlands, but it is possible that, as in other periods of history and prehistory, temporary difficulty provided an incentive rather than an obstacle to effort. Be that as it may, the Mesopotamian estuary offered, in fact, all the major potentialities for the production of city-life or—what is the same thing—civilization. It provided a fertile soil, water, easy river transit, unimpeded caravan-routes; and to these natural qualities were now added those of an industrious and disciplined people. At no long interval, the earliest cities of Asia came into being. The foundations were laid of that great Sumerian civilization which was to be, in some measure, the prototype of the civilization of the Indus.

It is probable and natural that the path of this urban development in Mesopotamia was not altogether a smooth one. In the course of it we can recognize changes sufficiently abrupt and extensive to suggest interruption and the advent of influences from new directions, probably outside Iran—possibly from the direction of Asia Minor. We are not here concerned in any detail with the Mesopotamian problem, and need not discuss this matter further. But it may be that a temporary obstruction to Iranian enterprise towards the West encouraged the use of outlets towards the East, towards Pakistan. And it would be logical to see in such a movement from the Plateau to the Pakistan plain a repetition of the previous movement to Mesopotamia, with parallel results in the creation of another great riverine civilization, that of the Indus valley. The most serious objection at present to this supposition is that, whereas the cultures of the west-Iranian Plateau resemble that of early Sūsā and Ur, the equivalent cultures of the east-Iranian Plateau or Baluchistan cannot yet be linked up closely with that of the Indus Civilization. A few examples of these Baluchistan cultures may here be briefly described.

These cultures are generally discovered on and in artificial mounds to which the Arabs give the name of *tell*, the equivalent of the Sindhi *daro*, the North-west Frontier *dheri*, the Baluch *dhamb*, or the Iranian *tepe*. The *tell* (the term most widely used) accumulates as the result of the successive rebuilding of a city, town or village, each successive structure being

erected on the remains of its predecessor, so that age by age the mound rises upon its own dead self. The free use of mud or mud-brick for walling contributes to this process, until a *tell* may tower to a height of 100 feet or more above the surrounding country. It is by the careful excavation of these mounds and the classification of their contents layer by layer that the cultural succession is ascertained, the layers forming as it were the leaves of a book of unwritten history. Little work of this kind has yet been done in Pakistan outside the main centres of the Indus Civilization, but a beginning has been made on a few of the mounds, and their importance is clearly such that every care should be taken of them pending their adequate examination. In particular, the widespread modern custom of burying upon them, and thus permanently preventing access, is one which in the interests of knowledge should be rigorously checked.

In recent years, archaeologists have begun to classify the known cultures from these mounds and have grouped them into two main categories. The grouping is founded upon the fact, observed first in Iran, that the more northerly cultures are characterized by the normal use of a *red* background to the painted designs of their pottery, whereas the more southerly cultures are characterized by the normal use of a *buff* or *yellow* background. At first sight, this seems a trivial distinction upon which to base a scientific classification, but in practice it is useful in the present elementary state of knowledge.

* * * * * * *

Amplifying this primary distinction with the place-names of certain sites where exploration has been carried out, Professor Stuart Piggott, who has done much to straighten out the available information, has proposed the following categories:

A. *Buff-Ware Cultures*

1. The Quetta Culture (from sites in the Bolan Pass).
2. The Āmrī-Nal Culture (from two sites, the first in Sind, the second at the head of the Nal valley in Baluchistan).
3. The Kullī Culture (from a site in Kolwa, in South Baluchistan).

B. *Red-Ware Cultures*

4. The Zhob Cultures (from sites in the Zhob valley of North Baluchistan).

All this is somewhat dry and technical, but only a fuller knowledge can clothe it with personality; and a few notes on each of the main Cultures may be added, therefore, less for their current interest than as a basis for future fieldwork and research.

The *Quetta Culture* (fig. 4), discovered by Professor Piggott, is best represented on five small village-mounds (the largest 600 feet long and 40-50 feet high) near Quetta, but there is evidence that it extends southwards also, towards Kalāt. The pottery is painted in a geometric style in purplish-brown or black paint on a buff ground with occasional fragments of fine shallow bowls of very hard grey ware having black-painted ornament. The designs include chevrons formed by combining thick and thin bands, an overall pattern made of diagonally divided squares, pairs of opposed triangles, and various distinctive stepped and oval motifs. The buff ware of the culture is comparable with very early pottery at Tal-i-Bakūn (Persepolis) and Sūsā in southern Iran, and may be the earliest yet identified in Pakistan, probably before 3000 B.C. The sites of this little-known culture are well worthy of excavation.

For the *Āmrī-Nal Culture* (fig. 3), it is more difficult to find Iranian parallels. Indeed these two sites, and others which may at present be grouped loosely with them, are themselves far from homogeneous in detail, and their partnership may have to be dissolved as

knowledge accumulates. Whatever their ultimate origin or origins, they would appear to have developed for a long time in the regions in which we find them. They possess, indeed, certain features in common. On the negative side, the terracotta figurines which are characteristic of other groups and, above all, of the Indus Civilization are absent from them. On the positive side, their pottery is frequently very thin and fine, and has a buff or pinkish paste covered with a white slip as a basis for painted ornament. This is outlined in black and brownish paint, with red paint as a secondary colour and occasionally with yellow, blue and green. The designs include panels framed in multiple lines and sometimes filled with black-and-white chequers, and bands of diamonds, chevrons, loops, scale-pattern and a yoke-shaped device—the last especially at Nal. Animal designs (lions, caprids, birds and fish) occur at Nal but not at Āmrī. Chert blades are found fairly freely at both sites, and at Nal two hoards of copper implements were discovered, including flat axes of primitive form, an elongated chisel, a tanged knife or spearhead, and a straight-sided saw. These are broadly comparable with types from the Indus Civilization, as is also a single steatite seal found at Nal. A bead of lapis lazuli, probably derived from north-eastern Afghanistan, occurred at Nal, together with others of agate and carnelian and of the glass frit known as faïence.

The villages or small towns in which the people characterized by this Āmrī-Nal culture lived were rarely more than two acres in extent and often less. They were occasionally defended by stone walls and bastions (Kohtrās Būthī and Dhillanjo-kot in Sind), and houses with foundation-courses at least of stone have been identified though not adequately explored. At Nal an extensive cemetery of this culture has yielded upwards of 100 graves, in which the bodies had, in some cases, been buried intact, in others, after "excarnation" or removal of the flesh elsewhere—a custom widespread in time and space and represented today, for example, by the Parsee rite. With the bones were buried numerous pots, which illustrate the potter's art there with exceptional amplitude.

An important feature of this composite culture is that at Āmrī and certain other sites it has been found *below*, *i.e.* it mainly antedates, the very distinctive Indus Civilization. On the other hand, the steatite seal of Nal, the copper implements and certain types of pot-decoration suggest a partial overlap between the two. There is, however, no evidence that the Āmrī-Nal Culture contributed directly to the formation of the Indus Civilization. It represents merely one of the local societies which constituted the environment wherein the Indus Civilization eventually took shape.

The third of Professor Piggott's four culture-groups is named from a village-mound upwards of 200 yards long at *Kulli* in the Kolwa district of South Baluchistan (fig. 3). Other sites of this culture occur in the same district and in that of Mashkai, and include well-known mounds at Mehī and Shāhī-tump. Unlike the previous culture, that of the Kulli series is characterized by numerous clay figurines of women and animals (mainly cattle), clay birds pierced for use as whistles, and model carts of the same material, and in this and other respects tends to approximate more closely to features of the Indus Civilization. The pottery is usually buff, with either whitish or pinkish slip on which the ornament is painted, mostly in black but sometimes with horizontal bands of red. Occasionally black-on-red appears, probably as the result of influence from the Indus sites. To the same influence may be ascribed tall dishes-on-stands like those of the Indus, but the more local forms are globular beakers, tall bottle-shaped vases, small flat dishes and straight-sided cups and jars. The distinctive painted decoration consists of a frieze of naturalistic animals and plants which completely encompasses the pot and is in contrast with the empanelled animals of the Nal pottery. In Professor Piggott's words, "the frieze represents a standard scene, in which two animals, usually humped cattle, but sometimes felines, dominate, in grotesquely elongated form, a landscape with formalized trees and

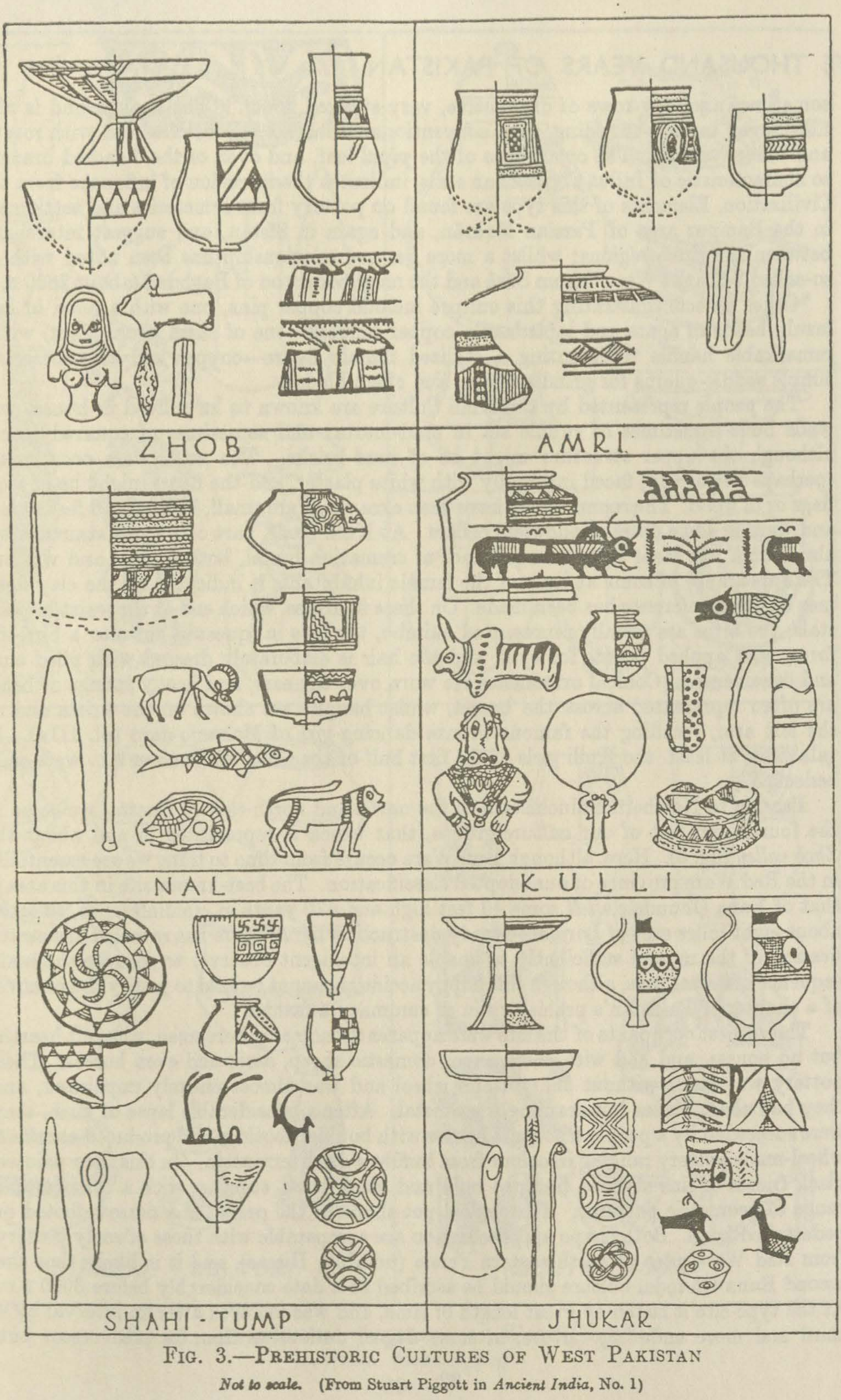


FIG. 3.—PREHISTORIC CULTURES OF WEST PAKISTAN

Not to scale. (From Stuart Piggott in *Ancient India*, No. 1)

sometimes ancillary rows of diminutive, very stylized goats." The background is often filled, even to over-crowding, with conventionalized birds and beetles, and with rosettes and other symbols. The occurrence of the *pipal* leaf, and even of the "sacred brazier" so characteristic of Indus Civilization seals, indicates the intrusion of influence from that Civilization. Elements of this type are found on pottery from cemeteries and settlements in the Bampur area of Persian Makrān, and again in Sīstan, and suggest interchange between the three regions; whilst a more general relationship has been noted with the so-called "Scarlet Ware" from Sūsā and the neighbourhood of Baghdad (about 2800 B.C.).

Other objects illustrating this culture include copper pins, one with a head of lapis lazuli, beads of agate and lapis lazuli, copper mirrors—one of them (from Mehī) with a remarkable handle representing a stylized female figure—copper and clay bracelets, simple saddle-querns for grinding corn, and chert blades.

The people represented by the Kulli Culture are known to have lived in houses with walls built sometimes of rubble set in mud-mortar and sometimes of squared blocks, although the upper structure might be of mud-bricks. The walls were occasionally (perhaps frequently) faced internally with white plaster, and the floors might be of stone flags or of wood. The rooms which have been excavated are small, 12 feet by 8 feet or less, and were in some cases windowless cellars. At Kulli itself, part of a stone staircase was also found. At Mehī there was evidence of cremation-burial, both in pots and without. The appearance of some at least of the female inhabitants is indicated by the clay figurines to which reference has been made. On these figurines, which end at the waist in pedestals, the arms are usually represented akimbo, the face is squeezed out into a bird-like form, with applied pellets for eyes, and the hair is elaborately dressed with piled curls and ornamented. Conical ornaments are worn over the ears, and heavy strings of beads are often represented across the breast, whilst bangles are shown on the wrists and up the left arm, recalling the famous bronze dancing-girl of Mohenjo-daro (pl. IIIB). In gala dress at least, the Kulli girls of the first half of the third millennium B.C. were gaily bedecked.

Passing to Northern Baluchistan, to the north and north-east of Quetta, we come to the fourth and last of our culture-groups, that which is represented in and about the *Zhob valley* (fig. 3). Here, although Buff Ware occurs from time to time, we are essentially in the Red Ware province of our adopted classification. The best-known site in this area is that of Rana Ghuṇḍai, a *tell* some 40 feet high and 470 yards in circumference, situated about eight miles east of Loralai. Steady destruction by villagers has revealed the stratification of the mound sufficiently to enable an intelligent observer to recover the main sequence of its cultures, although this happy accident cannot be held to justify the removal of a chapter of Pakistan's prehistory in so summary a fashion!

The earliest occupants of the site were apparently nomadic herdsmen, who left hearths but no houses, and had with them oxen, domestic sheep, asses and even horses. Their pottery was made without the potter's wheel and was almost entirely unpainted, and they had chert blades but seemingly no metal. After a considerable lapse of time, they were succeeded by a people who built houses with boulder-footings and produced excellent wheel-made pottery ranging in colour from buff to a dark terracotta. On this they painted black friezes of fine stylized humped bulls and black-buck, together with a considerable range of geometric patterns. The typical pot-shape of the period is a narrow-footed or pedestalled bowl. Both shape and decoration are comparable with those of early pottery from Red Ware sites of north-eastern Persia (notably, Hissar), and it is likely that the second Rana Ghuṇḍai culture should be ascribed to a date considerably before 3000 B.C. At the type-site it lasted no great length of time, and was followed after an interval by a third and more enduring culture, in some degree derivative from its predecessor but

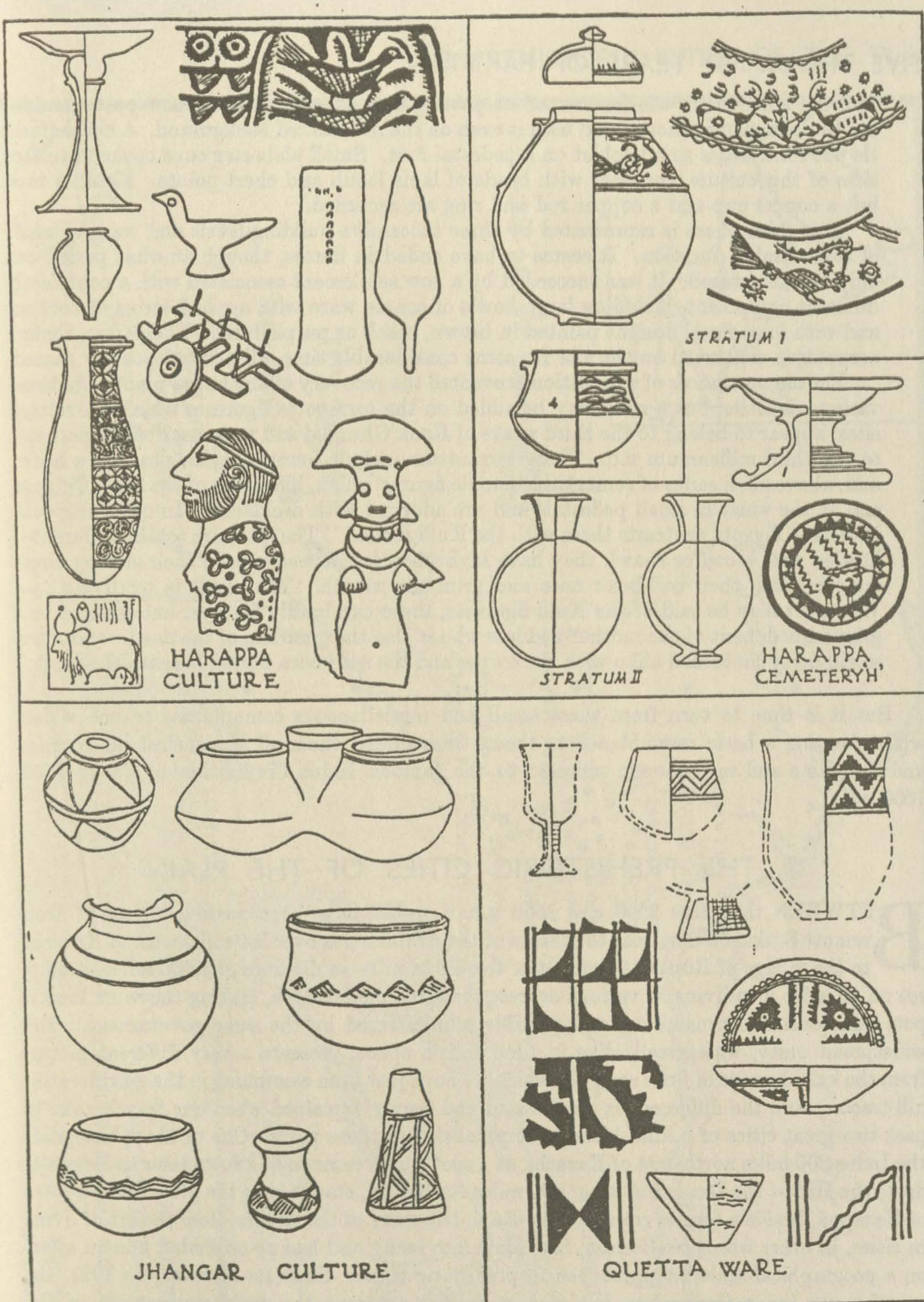


FIG. 4.—PREHISTORIC CULTURES OF WEST PAKISTAN

Not to scale. (Stuart Piggott)

showing a decline in the fineness of its potting and decoration. The new potters added red to their colour-scheme, and used it even on the normal red background. A characteristic pot-form was a small goblet on a pedestal-foot. Small alabaster cups occur in related sites of this culture, together with beads of lapis lazuli and chert points. Metal is rare, but a copper cup and a copper rod and ring are recorded.

This third phase is represented by three successive building-levels and was evidently of considerable duration. It seems to have ended in flames, though at what period can only be conjectured. It was succeeded by a new settlement associated with a completely different equipment, including large bowls of coarse ware with applied strips or cordons and with loose floral designs painted in brown, black or purplish-red. Thereafter, though occupation continued on the site for some considerable time, all painted pottery ceased.

The circumstances of excavation prevented the recovery of any house-plans from these various deposits, but a note may be added on the terracotta figurines which, on related sites, appear to belong to the third phase of Rana Ghuṇḍai and to be ascribable, perhaps, to the third millennium B.C. These terracottas include humped bulls, possibly a horse, and, above all, a series of remarkable female figures which, like those of the Kulli Culture, end at the waist in small pedestals and are adorned with necklaces. In other respects, Professor Piggott contrasts them with the Kulli series. " The faces are totally different—hooded with a coif or shawl, they have high smooth foreheads above their staring circular eye-holes, their owl-beak nose and grim slit mouth. The result is terrifying . . . Whatever may be said of the Kulli figurines, these can hardly be toys, but seem to be a grim embodiment of the mother-goddess who is also the guardian of the dead—an underworld deity concerned alike with the corpse and the seed-corn buried beneath the earth."

* * * * * * *

But it is time to turn from these small and miscellaneous communities to one which, whilst bearing a basic resemblance to them, transcended them all in political imagination and discipline and in economic success: to the famous Indus Civilization of about 2500-1500 B.C.

3. THE PREHISTORIC CITIES OF THE PLAIN

BETWEEN the years 2500 and 1500 B.C. it would have been possible to travel from remote Sutkagēn-dor, near the shores of the Arabian Sea over 300 miles west of Karachi, to the village of Rūpar at the foot of the Simla hills—a distance of 1,000 miles—and to see on all sides men living in various degrees the same mode of life, making the same kind of pots and tools and ornaments, and possibly administered by the same government. This widespread unity, widespread alike in time and in space, presents a very different picture from the kaleidoscope of little societies which we have just been examining in the neighbouring hill-tracts. And the difference is emphasized and partly explained when our travels take us past two great cities of a kind hitherto unparalleled in these parts. One of them lies beside the Indus 200 miles north-east of Karachi, at a spot which came to be known later as Mohenjo-daro, the Hill of the Dead; the other 400 miles further on, stands near the little Punjab town of Harappā, beside a former course of the Ravi, tributary of the Indus. Here the art of living in cities, in other words *civilization*, had come into being and had co-ordinated human effort on a geographical scale unapproached in prehistoric times. Since its discovery in 1921, the now-famous Indus Civilization has rightly ranked amongst the great civilizations of the ancient world.

Almost all the known remains of this civilization lie within the limits of West Pakistan

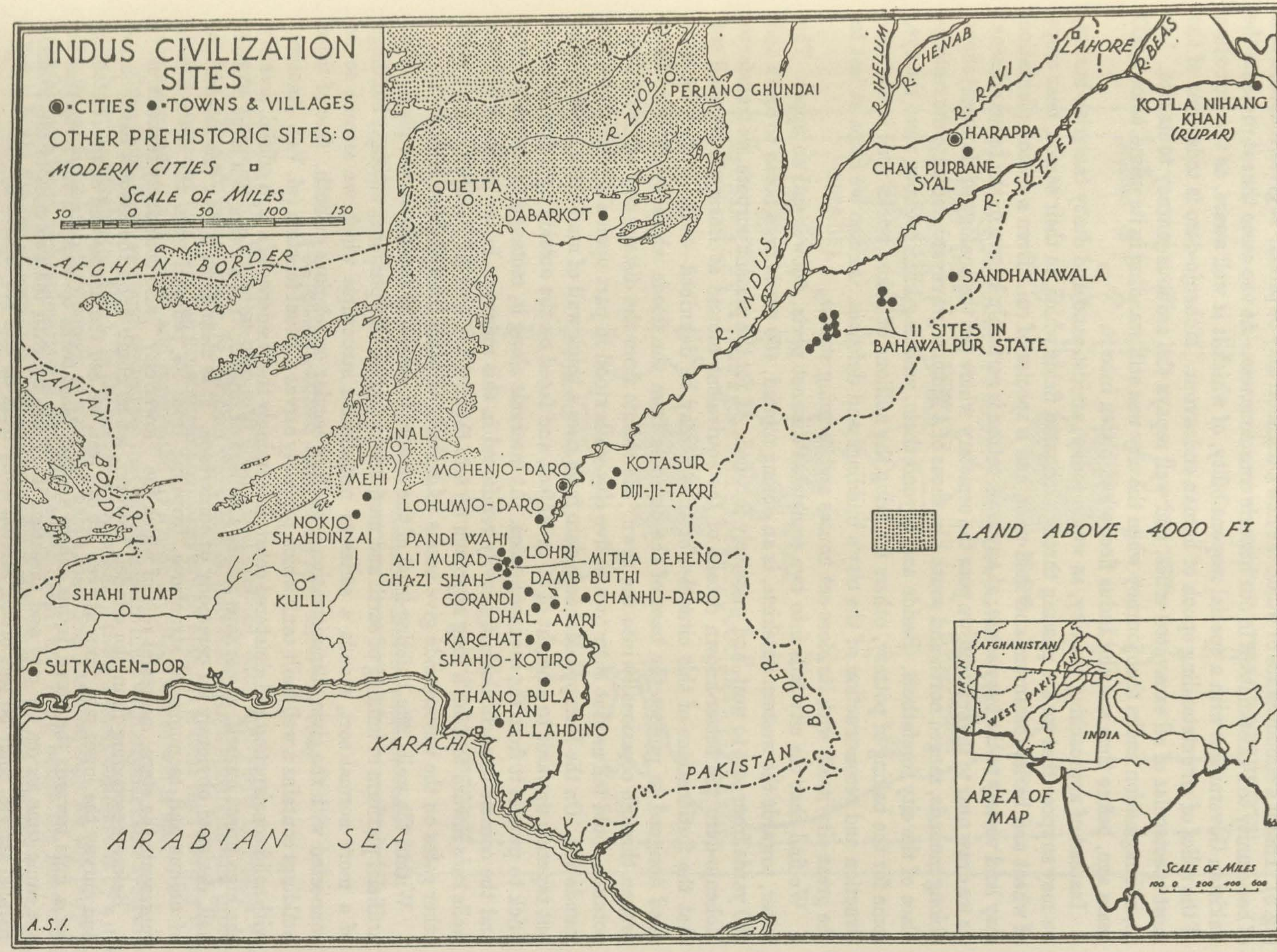

INDUS CIVILIZATION SITES
◉-CITIES •-TOWNS & VILLAGES
OTHER PREHISTORIC SITES: o
MODERN CITIES ▫
SCALE OF MILES
50 0 50 100 150
AFGHAN BORDER
IRANIAN BORDER
R. ZHOB
PERIANO GHUNDAI
QUETTA
DABARKOT
R. JHELUM
R. CHENAB
R. RAVI
LAHORE
R. BEAS
R. SUTLEJ
KOTLA NIHANG KHAN (RUPAR)
HARAPPA
CHAK PURBANE SYAL
SANDHANAWALA
R. INDUS
11 SITES IN BAHAWALPUR STATE
NAL
MOHENJO-DARO
KOTASUR
DIJI-JI-TAKRI
MEHI
LOHUMJO-DARO
NOKJO SHAHDINZAI
PANDI WAHI
ALI MURAD
LOHRI
MITHA DEHENO
GHAZI SHAH
DAMB BUTHI
GORANDI
CHANHU-DARO
DHAL
AMRI
SHAHI TUMP
KULLI
KARCHAT
SHAHJO-KOTIRO
SUTKAGEN-DOR
THANO BULA KHAN
ALLAHDINO
KARACHI
LAND ABOVE 4000 FT
PAKISTAN BORDER
ARABIAN SEA
A.S.I.
AFGHANISTAN
IRAN
WEST PAKISTAN
INDIA
AREA OF MAP
SCALE OF MILES
100 0 200 400 600

FIG 5

(fig. 5). That is a circumstance of which the new Dominion may be proud. It gives, indeed, a sort of basic unity to Pakistan itself in our historic consciousness. At the same time it presents the Pakistan Government with a special responsibility, of which it is well aware, as the custodian of the relics of an outstanding epoch of human endeavour. Mohenjo-daro is today one of the most spectacular of all excavated cities, and well repays the arduous journey to its site. Let us, in imagination, make that journey when the city was still standing in its prime, some 4,000 years ago, before time and the Indus floods had bitten into it.

Instead of approaching the city, as we do today, amidst sand and dusty tamarisk-bushes, we may suppose that we are passing through irrigated fields which, in their season, bear crops of wheat and barley, sesamum and field-peas, and a species of *rai*. Even a cotton-plantation may lend variety to the busy scene; at any rate, cotton is certainly known to the Indus citizens. As we draw near to the suburbs, we pass the cemetery where (on the analogy of Harappā) slight oblong mounds, ranged north and south like those of a Muslim graveyard, indicate the resting-place of the city forefathers. Beside and beyond them, smoking kilns begin to meet the eye, some for the baking of pottery, others for firing the millions of baked bricks used in the construction and reconstruction of the city's buildings and defences. And so we come at last to the great city itself, with its close-set houses and teeming streets.

We find that the city falls into two somewhat distinct parts, a lower and an upper. The latter, towards the western outskirts, is an oblong mound, 400 yards from north to south and 200 yards from east to west, and massively fortified. If, for the present purpose, we transfer to Mohenjo-daro the better-known details of the equivalent mound at Harappā, we shall see that the fortifications of this citadel—for thus it may be described—stand upon a bank or *bund* designed to protect the base of the defences from the floods which we know to have broken through occasionally into the town. Merchants from the distant city of Ur in Mesopotamia could tell us that their own native city-walls stood in part upon a similar protective foundation. On the Harappā-Mohenjo-daro *bund* rises a thick wall of mud-brick, 40 feet wide but tapering upwards to a height of 30 or 40 feet, and faced on the outside by a skin of baked brick to protect it from the monsoon-rains. At intervals along it, rectangular towers project, and the corners in particular are heavily reinforced in this manner. In the northern end the walls turn inward to flank a long approach up into the interior, and (at Harappā, at any rate) other gates on the western side give access to external terraces, designed for ceremonial.

Within the walls, the building-level of the citadel is raised 30 feet above the plain by an artificial platform or infilling of earth and mud-brick; and on this platform, amongst buildings of a more normal sort, stands a series of remarkable structures which we assume to be connected with the civic administration—whether secular or religious or both. One of these buildings contains a well-built tank which probably serves a ritual function (pl. VA). Another, with solid construction and cloistered court, is seemingly the residence of a high official, possibly the high priest himself, or perhaps rather a college of priests. Yet another is a large pillared hall, designed obviously for ceremony or conference. It is clear enough that this assemblage of unique and monumental structures, frowning from its pedestal upon the town below, represents the stern, masterful rule of which the " lower city " also constantly reminds us.

Before descending from the citadel, however, let us climb upon the eastern battlements and survey the lower city from above. At our feet, we see the houses and shops stretching for a mile towards the broad Indus, where another *bund* seeks to ward off the river that at the same time serves the city and threatens it. From beneath the two ends of the citadel, parallel streets, some 30 feet broad, stretch away from us and are crossed by other straight

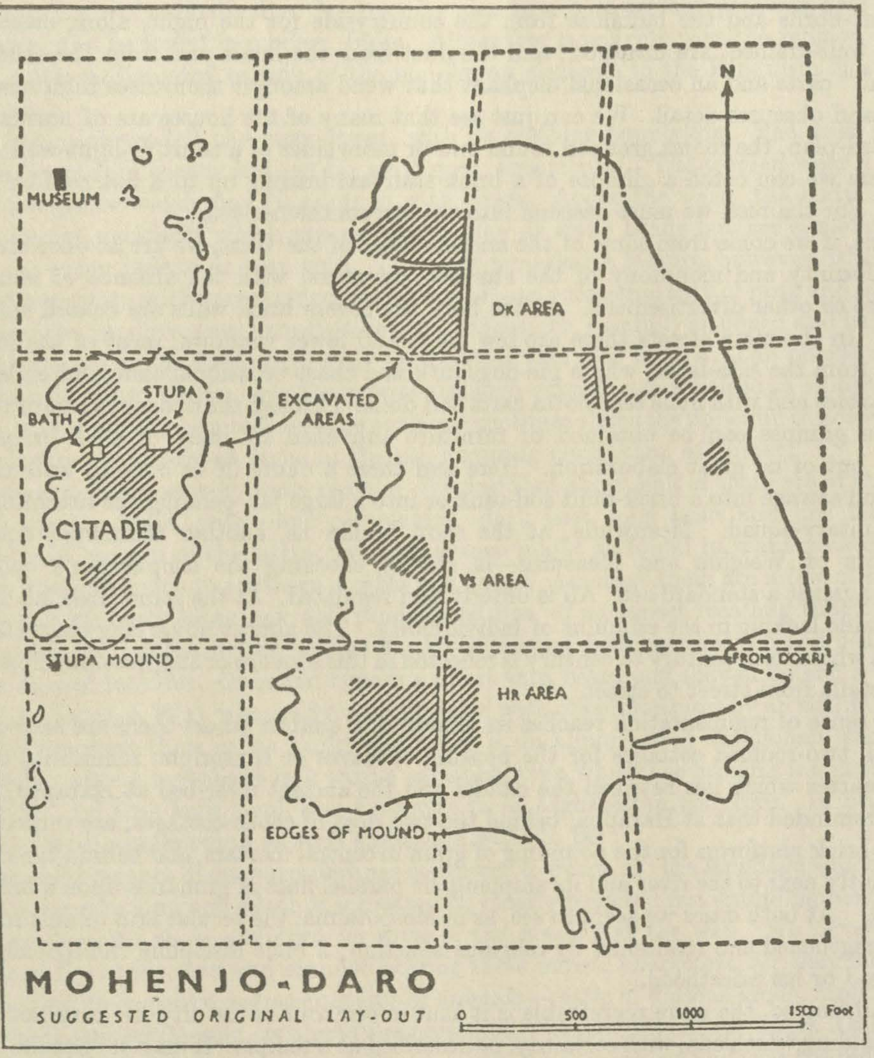


FIG. 6

(From Stuart Piggott, *Some Ancient Cities of India*, Oxford Univ. Press)

streets which divide the town-plan into great oblong blocks, each 400 yards in length and 200 or 300 yards in width (fig. 6). Within these blocks, purposeful lanes subdivide the groups of buildings and maintain the general rectangularity of the plan. It is clear that the city is no chance-growth. It is drilled and regimented by a civic architect whose will is law.

Even from where we stand, we can see that the streets are lined with a remarkable system of brick-covered drains (pl. IIIA). In the nearer distance one of these is being cleaned out by a uniformed municipal sanitary squad, at a point where a man-hole has been built for the purpose. (2,000 years later, archaeologists will find the heap of debris still lying beside the man-hole.) But it is the " hour of cow-dust," when the children are driving in the humped cattle and

the short-horns and the buffaloes from the countryside for the night, along streets which, though well-drained, are unpaved; and the dust from the herds and from the solid-wheeled "Sindhi" carts and an occasional elephant that wend amongst them rises high amongst the houses and obscures detail. We can just see that many of the houses are of normal oriental courtyard-plan, the rooms grouped round two or more sides of a court or light-well; and here and there we can catch a glimpse of a brick staircase leading up to a flat roof or an upper storey. For the rest, we must descend into the streets themselves.

There, if we come from some of the ancient cities of the West, we are at once struck with the uniformity and monotony of the street-architecture, with the absence of monumental sculpture or other divertisement. At the best, the severe brick walls are coated with a mud plaster. In the main streets there are few doors and fewer windows; most of the houses are entered from the side-lanes, where pie-dogs lurk and chase occasional cats, and children play with marbles and with little terracotta carts and dolls. Through the doors of some of the better houses a glimpse can be obtained of furniture enlivened by inlay of shell or green-blue faïence, but of no great elaboration. Here and there a chute in an outside wall discharges waste and sewage into a brick-built soil-tank or into a large jar, pending the attentions of the busy sanitary-squad. Meanwhile, at the shop beside us, another municipal squad—the Inspectors of Weights and Measures—is sternly checking the shopkeeper's cubic stone weights against a standard set. All is orderly and regulated. At the same time, all is a trifle dull, a trifle lacking in the stimulus of individuality. The almost unvarying character of the city as a whole from century to century is reflected in this absence or suppression of personality in its details from street to street.

This sense of regimentation reaches its climax in a quarter where there are sixteen small, identical, two-roomed cottages for the housing of slaves or conscripts, reminding us of the coolie-quarter which lies between the citadel and the ancient river-bed at Harappā. We are further reminded that at Harappā, behind the two rows of coolie-cottages, are serried lines of circular brick platforms for the pounding of grain in central mortars, and behind these in turn, significantly near to the river and its shipping, lie parallel lines of granaries upon a brick-faced pedestal. At both cities we seem to see, as in Mespotamia, the secular arm of an administration strengthened and straitened by religious sanction; a civic discipline rigidly enforced by a king-god or his priesthood.

That being so, the more regrettable is it that in our tour of the city we have not found a single building which can, with certainty, be described as a temple. It may be that the dust has obscured, as today a much later Buddhist stūpa obscures, the highest point of the citadel, where the chief temple might be expected. Nor can we make good the omission later on at Harappā, since there a still more recent obstruction (a cemetery) will baffle the archaeologist. For the religion and ritual of these cities we must console ourselves with lesser relics. Thus, terracotta figurines of women seem to show that a Mother-goddess played some part at least in domestic ritual, and there are suggestions of a form of phallus-worship. Seal-representations of a three-faced and horned male god (pl. IVB) squatting with legs bent double and surrounded, on one seal, by an elephant, a tiger, a rhinoceros and a buffalo, suggest a forerunner of the Hindu Śiva. There are also many indications on seals and pottery that trees, particularly the *pipal* or sacred fig-tree, were worshipped, as widely in India today. Animals, notably the bull, which is sometimes accompanied by a so-called "sacred brazier" or manger, were apparently objects of veneration, and composite animals, such as one with a human face, an elephant's trunk, the forequarters of a bull and the hindquarters of a tiger, presumably

represent a synthesis of animal-cults. Snakes may also have been worshipped, and here again many parallels may be found in modern India. Altogether it is likely that the religion of the Indus Civilization anticipated certain of the non-Āryan elements in the Hinduism of a long-subsequent age.

But we have not yet left the busy street, with its seething population. The dress of the local citizen is notably scanty but, so far as it goes, ornamental. The women wear a short skirt held by a girdle which may be adorned with beads. Above the waist, the body is bare save for extensive necklaces which are usually of clay or stone beads but are sometimes of blue faïence or green jadeite or even gold. The most remarkable feature, however, is the fan-shaped headdress worn with grave, ceremonious mien by an occasional lady of rank and fashion. At the sides of the headdress are pannier-like cloth extensions, carefully stiffened and balanced and of grotesque aspect to the foreign eye. Of the men, less is to be said. The poorer classes wear a loin-cloth, a few, particularly the priests and high officials, are wrapped in embroidered cloaks. Many of them are bearded, but the seniors sometimes shave the upper lip in accordance with a hieratic fashion more at home in the neighbouring civilization of Sumer.

Let us peer at the passers-by more closely. We find that about half of them are of medium height and slender build, with olive complexion, dark hair, long head and fine features. Similar men and women of this attractive appearance might be found in many places, from the western Mediterranean to southern Arabia and India. Amongst them are a few of smaller stature, dark, with curly black hair and pronounced lips, of an aspect recalling that of some of the " aboriginals " of the Indian peninsula. An occasional passenger has a broad head with regular but rugged features. Of mixed type is a priest with beard and shaven lip and a woven fillet round his hair (pl. IVA), whose advent is received with obsequiousness by all within range. And striding amongst them in his Turkoman boots is an almond-eyed Mongolian who came in this morning after a moonlight trek with a camel-caravan which has brought a mixed cargo of dried fruits and blue lapis lazuli and turquoise from Afghanistan and Iran. In brief, the human scene is as cosmopolitan as such scenes are wont to be.

One perennial feature of our surroundings continues to evade us: the language which many of these folk are speaking and which is indicated by clearly rendered but unintelligible characters upon goods in the shops and even on some of the pottery at the well. We nevertheless glance frequently at the seals and sealings bearing these unread characters, for they also bear vivid and superbly engraved representations of animals—cattle of various kinds, tiger, rhinoceros, elephant, crocodile—and, as already remarked, the shapes of gods (pl. IVB). Only ordinary mankind, it seems, is passed over as of no account. Once more, we find that the individual is of no great interest to this efficient but curiously detached society.

* * * * * * *

Before continuing our description, we may pause to consider for a moment certain aspects of these cities and their civilization on a more abstract plane. We have observed the astonishing *sameness* of that civilization, both from place to place within its 1,000-mile stretch and from age to age within its 1,000-year span. Another quality of it is its *isolation*. Only in a general way is it linked with the smaller cultures of the last chapter. Its distinctive pottery—deep red with black patterns of scales or intersecting circles or *pipal* leaves or peacocks or fish—its seals, some of its inlays and ornaments are peculiar to itself. We know not the circumstances of their origin. Its commercial intercourse with the outside world was of the slightest, at any rate in non-perishable goods; what trade there may have been in perishable commodites such as spices, unguents, cloth and slaves, we cannot of course tell in the absence

of an intelligible record. Most of the tools in daily use were still of stone, long chert blades in particular being employed as knives and for other purposes; but simple axes, knives, arrowheads, spears and other implements were also made from copper or its alloy bronze, and these metals, together with silver, were sometimes used for vessels or figurines (pl. IIIB). For these purposes copper was probably brought from Rajputana, not necessarily beyond the jurisdiction of the Indus State. Iron was, of course, still unknown at this remote date. A little lapis lazuli was, as we have seen, imported from north-eastern Afghanistan. Occasionally a stone or alabaster unguent box may have come from South Baluchistan or southern Persia, a bronze socketed axe-head or rare gold disc-beads from Mesopotamia, a bronze pin from northern Persia or Asia Minor, a fragment of amazonite from South India. Amongst exports, a few distinctive products such as seals, inlays and pottery found their way from the Indus to Ur and other cities of Mesopotamia at a time which Mesopotamian archaeologists can identify as about 2300 B.C. But, considering that Mohenjo-daro lived through upwards of nine rebuildings, the total volume of this trade on either side is insignificant.

How then did the Indus cities come into being ? In spite of their difference and detachment from the contemporary (and older) cities of Mesopotamia, it is unlikely that the civic idea was an absolutely independent invention of the Indus folk. And here it is perhaps possible to find a useful analogy in the fully historical period. When Islam came to Pakistan and India from the West, it brought with it the *idea* of mosque and tomb, the *ideas* of the rhythmic triple *iwan*, the emphatic dome, the minaret. But India, whilst adopting these ideas, adapted them to her traditions. She accepted but transmuted. And for a demonstration of this process, we have only to compare the Iṣfahān of S͟hāh Abbās with the almost contemporary Fatḥpur Sīkrī of Akbar the Great: the one completely and soberly Persian, the other touched with the fantasy of the jungle. So also, we may suppose, in the third millennium B.C. India (Pakistan) received from Mesopotamia the already-established *idea* of city-life or civilization, but transmuted that idea into a mode substantially new and congenial to her. Above all, she developed her civilization, as at more than one later period, along ambitious imperial lines. Whether the outstanding cities of Mohenjo-daro and Harappā represent one empire or two, we cannot know; if the latter, we may recall that in the ninth century A.D. two Arab principalities divided the Indus between them in somewhat similar fashion, with capitals at Multān in the Punjab and Manṣūrah in Sind. It does not greatly matter. But the immensely vaster size of these two cities (each of them three or more miles in circumference), when compared with the other sites of the same culture, once again emphasizes that intense *centralization* which we have recognized at all stages of the Civilization. Sameness, isolation, centralization are its abstract qualities: it was a civilization within an Iron Curtain which preserved it marvellously intact for a thousand years, more or less. And then, about 1500 B.C., something happened to it.

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We are once again on the eastern fortifications of the citadel of Mohenjo-daro. Before us lie the familiar straight streets, stretching far away towards the Indus. But otherwise the scene is a very different one from the peaceful evening homecoming which we witnessed before. Now volumes of smoke and flame are rising from several of the houses below us. Led by a gesticulating man in an outlandish chariot drawn by two small ponies which are stretched at a fast canter a horde of howling swordsmen is rushing down one of the main streets. By the chariot-pole crouches the charioteer, and every now and then the swaying figure beside him fits an arrow to a short, stocky bow and discharges it into the panic-stricken groups of fleeing citizens. As we watch, a gang of desperadoes turns into one of the side-lanes where half-a-dozen wretched creatures, including a

small child, have just emerged from a house and are seeking escape. In a moment their bodies are sprawling in the dust and their cries cease. A little further on, a rash refugee has returned for some treasured knick-knack, and he shares the same fate. At another spot a pathetic group of eight or nine figures, half of them children, are emerging heavily laden from the Quarter of the Ivory Workers. They are surrounded: their screams reach a brief crescendo and die away. Their treasures have been transferred to other hands, and the looters are thrusting upon their way. Elsewhere again, we look down on one of the public well-rooms, in which local house-folk were drawing water when death came to their city. For a time they have cowered beside the well as the screams and the shouting draw steadily nearer. Now they can bear the suspense no longer. Two of them are climbing the stairs, have reached the street, when the invading mob closes upon them. They drop, and are instantly trampled into the sand. A burly fellow with raised sword turns on to the well-house stairs and cuts down the cowering woman who is struggling up them. She falls backwards across the steps, and her companion, still beside the well, is struck down instantly. Laden with plunder, the ravening horde sweeps on. A part of it is already streaming up the long stairway into the citadel on which we stand. It is high time for us to take flight into the future, through thirty-four centuries during which the poor bones of the massacred will lie there in the derelict streets and lanes until twentieth century archaeologists shall dig and find them where they, with their age-long Civilization, perished within the hour.

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It remains to expand this story a little in the colder light of science and literature. Recent revisions of all the related evidence make it clear that the Indus Civilization was still living in the early centuries of the second millennium B.C. It was succeeded by a variety of (materially) inferior cultures, in some cases after a phase of violence. Into this picture it is difficult not to bring the evidence of the earliest literature of India, the *Ṛigveda*, which is agreed to represent, from the Āryan point of view and in the vague way of a hieratic hymnal, the conditions of the invasion of the Punjab by the Āryans at a date which, on archaeological and other grounds, is now commonly ascribed to the fifteenth century B.C. The Vedic hymns make it clear that the mobile, city-less invaders differed at every point from the long-static citizens whom they invaded. The term used for the cities of the aborigines is *pur*, meaning a " fort " or " stronghold." One of these embattled cities is called " broad " and " wide." Sometimes they are referred to metaphorically as " of metal." " Autumnal " forts are also named, perhaps with reference to the capacity of a *bund*, like that on which the Harappā defences stood, to withhold the autumn inundations. Forts " with a hundred walls " are mentioned. The citadel may be of stone or of mud-brick (" raw," " unbaked "). Indra, the Āryan war-god, is *puraṁdara*, " fort-destroyer." He shatters " ninety forts " for his Āryan protégé, Divodāsa. The same forts are doubtless referred to where in other hymns he demolishes variously ninety-nine and a hundred " ancient castles " of the aboriginal leader Śambara. In brief, he " rends forts as age consumes a garment."

Where are—or were—these native citadels ? It has in the past been supposed that they were mythical or, at the best, mere palisaded refuges. But, since the discovery of fortifications at Harappā and Mohenjo-daro in 1944, we know that at least the administrative nucleus of these great cities was strongly fortified. We know too, that lesser sites of the same Civilization, such as Ali Murād and Kohtras in western Sind and Sutkagēn-dor in Makrān, could boast defensive walls of stone, stone-and-mud, or brick. The general showing, then, is that of a highly evolved " aboriginal " civilization of essentially non-Āryan type, now known to have employed massive fortifications and known also to have dominated the river-system of

Pakistan at a time not distant from the likely period of the earlier Āryan invasions of that region. What destroyed this firmly settled civilization? Climatic, economic, political deterioration may have weakened it, but its ultimate extinction is more likely to have been completed by deliberate and large-scale destruction. On circumstantial evidence, Indra and his Āryans stand accused. If we reject this evidence, then we have to assume that, in the short interval which can, at the most, have intervened between the end of the Indus Civilization and the first Āryan invasions, an unidentified but formidable civilization arose in the same region and presented an extensive fortified front to the invaders. The assumption is a wilful and unlikely one. It is now, therefore, generally accepted that the Indus cities were, in fact, those referred to in the *Ṛigveda*, and that they were destroyed by Āryan invaders in or about the fifteenth century B.C.

4. THE ĀRYAN INVADERS

OF what sort were these Āryan-speaking folk who descended upon the Punjab with such violence in or about the fifteenth century B.C.? At present the archaeologist is strangely silent about them. A few bronze swords and other implements have been ascribed to them, but this is admittedly mere guesswork. For the rest, even guesswork fails. If we are to fill up, however tenuously, the 1,000 years between the end of the Indus Civilization about 1500 B.C. and the annexation of the Punjab by Persia shortly before 500 B.C., we must turn to the Vedic literature for such shadowy material as we can extract from it. In the present context, this task need not detain us long.

Between the unread inscriptions of the Indus Civilization and the epigraphs of Aśoka in the third century B.C. (see p. 40) there is no vestige of the written word in Pakistan or India. On the other hand, there is a great body of religious poetry and prose which was handed down orally from age to age with meticulous accuracy and has been written down in modern times. In this the *Ṛigveda* is presupposed by the rest and is, therefore, the oldest. Its absolute date is less certain, but there is general agreement amongst philologists that it dates back to the twelfth century B.C. or earlier. This date is consistent with that of the movements of Āryan peoples in western Asia as recovered by archaeology and epigraphy, and we may, therefore, admit the evidence of the older portions of the *Ṛigveda* in an attempted reconstruction of the Āryan society which settled in West Pakistan soon after the middle of the second millennium B.C.

Many of the hymns of the *Ṛigveda* are addressed to the Āryan war-god Indra, who is the apotheosis of the Āryan hero—strong, bearded, of mighty appetite, and a great drinker of the divine liquid, *soma*. He fights either with the heavenly thunderbolt or with the more mundane bow. He rides in his chariot, raids cattle, and, as we have seen, loots and destroys fortresses. His rival is Rudra, who is young, swift and sinister, and commands a warrior-band, the Maruts. His opponents, the city-folk, are the *dasyus*, who are black, noseless (flat-nosed), of unintelligible speech, and worship strange gods. We are reminded of the dark flat-nosed people whom we saw in the streets of Mohenjo-daro (p. 29), and of the hints of non-Āryan religion, even of Śiva-worship, which we also noted (p. 28).

The Āryans grow grain (possibly barley) and use the plough, but are first and foremost cattle-breeders and beefeaters. They also have flocks of sheep and goats; and they employ leather and wool freely. But, above all, they use horses, apparently of a small breed suitable only for draught. The typical vehicle, whether for war or for racing, is the two-horsed, spoke-

wheeled chariot, carrying a warrior armed with a bow and sometimes a spear, and a charioteer who stands or crouches beside him.

The hearth is the centre of domestic life, but we are told little of the dwellings themselves, save that they are of timber, rectangular and thatched. There are also assembly-halls from which women are excluded, where the men-folk transact business and gamble. Temples, on the other hand, do not appear to exist as specialized structures; but there are turf-altars and animal sacrifices, at which the victims are tied to posts. Music and dancing are indulged in, and there are drums, flutes and seven-stringed harps.

Such, in bald outline, are some of the evidences supplied to us by the *Ṛigveda.* The picture is one typical of the heroic age in many lands—in Homeric Greece, for example, and in the Celtic West. It is that of a mobile warrior-aristocracy, interested in feeding and fighting but little concerned with its humbler foot-slogging peasantry. Its simple architecture and lack of temples are in accordance with its essentially vagrant character, although its ploughs imply the rudiments of stability. Its heroic, spontaneous barbarism is in striking contrast with the unheroic regulated civilization which confronted it. Its initial victory was inevitable; but no less inevitable was its subsequent assimilation of many elements and ideas—particularly religious ideas—from the civilization which it shattered. When West Pakistan eventually emerged in the first light of history as a Persian province, its Āryan quality was, we may be sure, of a very different kind from that of the protagonists of the *Ṛigveda.* Indra had won the battle, but Śiva won the war.

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It is likely that evidences of change or disturbance in some of the ancient sites of the Indus valley and its environs reflect the events of the Vedic period. But we do not know enough yet to say whether, in any particular case, the intruders were Āryans from afar, or whether they were more locally displaced persons in a time of general trouble. Thus at the Rana Ghuṇḍai mound, noted above in chapter 2 (p. 22) in connection with the Zhob region, the third group of occupation-layers ended in a great conflagration, which was followed by an entirely new culture. At Nal there was an apparently equivalent burning, which has given the mound the local name of the Sohr Damb or the Red Mound, from its fire-reddened soil. At the small *tell* of S̲h̲āhī-tump, near Turbat in South Baluchistan, an inhumation-cemetery of a new folk having affinities with a south Persian culture of about 2000 B.C. or a little later was inserted into a derelict village that had been in contact with the Indus peoples. At the site of C̲h̲anhū-daro, some eighty miles south-west of Mohenjo-daro, an Indus population deserted their homes after a long occupation and were succeeded by a poorer folk (known to archaeologists as representatives of the " Jhukar " culture, fig. 3) who re-used some of the derelict houses and supplemented them with rectangular hovels of matting paved with broken brick. The newcomers had circular uninscribed seals or seal-amulets of pottery or faïence, bearing a crude decoration lacking all the delicate realism of the Indus series. Similar seals, but of copper, were found in the S̲h̲āhī-tump cemetery referred to, and a copper shaft-hole axe also links C̲h̲anhū-daro with S̲h̲āhī-tump and the West.

And lastly at Harappā itself, after the abandonment of the city, a strange folk of unknown origin arrived and built shoddy houses among the ruins. Their burial-rite was, at first, by inhumation, but later the custom was introduced of exposing the dead and subsequently interring selected bones in large urns. The associated pottery is of a deep red colour with elaborate designs painted in a blue-black pigment which tended to " run " a little and so soften the outlines. These so-called " Cemetery H " people (fig. 4) have also been identified in

Bahawalpur State, but little is known about them, nor is it easy to guess how long after the departure or subjugation of the Indus population their arrival should be placed.

From these prehistoric or " protohistoric " quicksands, we pass on now towards the firmer ground of the historic period; but in doing so we must glance in passing at the record of a group of monuments which is at present a legend rather than a fact.

5. MEGALITHS

"MEGALITHS " are difficult to define. Strictly speaking the term means " large stones," and is applied to more or less rough standing-stones, circles or large graves which owe their stability rather to the massive character of their crude masonry than to any developed skill in construction. In practice the term shades off into a great range of primitive structures, some of them built of quite small stones or even of timber. Here we are not concerned with elaborate or variant forms. Indeed, except for a single stone circle and for a few scraps recorded in the postscript on p. 35, we are not concerned with any forms at all which living eye has seen, and this short chapter is inserted mostly as a record of observations made nearly a century ago and as a stimulus to further search.

In the fifties of the nineteenth century a Captain Preedy, then Collector of Karachi, travelled about his district with open eyes and, amongst other things, noted that " stone graves . . . are found in great numbers throughout the hilly district which extends along our western frontier. They are usually met with in elevated positions, and consist of three or four large stones set on edge, with a flat stone placed horizontally on the top. There would appear to have been no uniform rule observed as to the direction in which these graves were placed. . . . I had the pleasure of pointing out one of these groups to you a few days ago, on the hills near Waghodur (20 miles east of Karachi), and I think we both agreed that, with the exception of the hole in one of the side stones or walls, the graves exactly resemble those described by Captains Meadows Taylor and Congreve " (in the Deccan and the Nilgiris of South India). H. B. E. Frere, then Commissioner in Sind, added that " cairns and cromlechs, such as are described by Captain Meadows Taylor, are common on the road to Shah Billawal, in Baluchistan, and also in the hills on the direct road from Karachi to Kotri. They are generally known as Kaffirs' graves "—a term which implies the tradition that they are of pre-Muslim origin.

The megalithic graves referred to, as described by Taylor and Congreve, are slab-covered cists about 6 feet long, 4 feet broad and 6 feet high, generally with a round hole (known as a " port-hole ") upwards of 1½ feet in diameter in one of the end slabs, and either buried completely or standing partially or wholly above ground. In the latter case they seem to have been covered mostly by a heaped-up mound or cairn; and in most instances they are surrounded with a circle of large boulders or slabs. The graves commonly contain remains of several human bodies which had, sometimes at least, been temporarily exposed elsewhere for " excarnation " or preliminary removal of the flesh. They also include pots which formerly (it is presumed) contained food-offerings, and an elaborate equipment of iron weapons and tools, and sometimes beads of clay, stone or gold. A group carefully examined in Mysore State in 1947 was dated approximately to 200 B.C.-A.D. 50.

Such graves are very abundant in peninsula India, generally on the granite-formations which are particularly suitable for their construction, but no certain example has been seen in recent times north of the Hyderabad district, Deccan. It would, therefore, be exceedingly

interesting and important if analogous tombs could be verified as far north as Karachi. Further west and north-west, in the Caucasus, in Syria, in coastal Europe and more vaguely in North Africa similar tombs have long been known to archaeologists. Most of these tombs are from 1,000 to 2,000 years earlier than the South Indian series, though some of the African examples *may* approach more nearly to the Indian dating. But in spite of the seeming remoteness in time and space between the eastern and the western groups, it is not impossible that they are connected in some fashion with each other. A series in the Karachi district, near the mouth of the Indus—that ancient (and modern) meeting-place of West and East—would greatly strengthen this supposition. Here is a chance for Pakistan fielo-archaeologists to discover, or rediscover, in the neighbourhood of Karachi, yet a further missing link in the chain of human vagrancy.

Apart from these nebulous megalithic graves, there is one monument in West Pakistan to which the term megalithic may be applied: a solitary stone circle in the North-West Frontier Province, some 17 miles east-north-east of Mardan and 24 miles north-east of Nowshera. The present writer has not seen this circle, but Col. D. H. Gordon's description may be quoted:

> " At about the 17½ milestone (from Mardan on the main Swabi road) there is a track running north to the large village of Shewa; on the right of this track, hidden by the trees of a graveyard until one is close upon it, is a stone circle named by us after the village of Asota close by it. The circle originally consisted of 32 stones, all roughly 10 feet high, disposed on a regular diameter of 57 feet. 14 of the stones are missing and many are broken or weathered. The stones are irregularly spread, the minimum spacing being 2 feet 2 inches and the maximum 4 feet 4 inches. There can be little doubt that these stones come from Turlandi (3 miles to the south-south-west), but there is nothing whatsoever to indicate their date. The circle is associated with a local legend of the usual ' people turned into stone ' type: A raiding party is said to have surprised and ravished some women who were working in the fields. As the raiders made off back to the neighbouring hills, the women called upon the Almighty to visit them with a judgement. Whether or not the Ominiscient was aware that their lamentations were in excess of the genuine outrage to their virtuous feelings, he changed the protagonists impartially into stones; sundry boulders on the hillside being indicated as the raiders, and the circle as the doubly ill-fated ladies."

As Col. Gordon remarks, nothing is known about this monument. The only megalithic structure in any way comparable in this quarter of the sub-continent is an irregular group of standing stones in the vicinity of Srinagar, Kashmir.

* * * * * * *

Since this chapter was written the writer has seen a few of Preedy's stone tombs, or others like them. About 20 miles east-north-east of Karachi, 3½ mlles north-east of the village of Murad Memon and a quarter of a mile north of the hamlet or *goth* of Hāji Allahdino, amidst the desert scrub are the remains of a rough sandstone cist, measuring about 5½ by 3½ feet internally and with the long axis at 120 degrees magnetic, *i.e.* about east-south-east. The slabs are 7-10 inches thick and are untrimmed. They are half buried in the sand, and the northern side-slab and the capstone are represented only by broken fragments in the vicinity. There is no visible trace of a port-hole, and without excavation nothing more can be said about the monument save that it is generally of the class here under consideration. The name " Kaffir's grave " applied to it by the villagers indicates a pre-medieval antiquity.

Again, about half a mile north-west of the nineteenth milestone on the Karachi-Kotri highroad, and rather more than half a mile south of the hamlet of Khānto, is a group of small stone cists averaging 3-3½ by 2-2½ feet internally, associated with minute scraps of bone on the surface but almost completely buried in sand. These are also known as Kaffirs' graves, but their relatively small size differentiates them from the main categories of megalithic monuments. One of them appears to be surrounded by a stone circle about 27 feet in diameter.

These last-minute observations merely emphasize the need for further research.

6. EARLY HISTORY: TAXILA

WE arrive at last in the borderland of history.

One day in the year 326 B.C., Alexander the Great of Macedon stood on the western bank of the Indus at the head of a motley army that had fought its way with him half across Asia. It was ragged and patched, laden with a vast assortment of loot, and perennially hungry. Its leader stood awhile and surveyed the scene, his head set a little aslant on a sturdy neck and framed with stormy hair. In front of him, a timber bridge built by his advance-party pointed to Further India. Beside the bridge lay two thirty-oared galleys which had also been improvised for the crossing, and round about hovered a scattering of native craft. But it was less at these things that Alexander was gazing than at the landscape on the opposite bank. As far as eye could see stretched a seething mass of grunting oxen and bleating sheep, more than 10,000 of them; and amongst them towered some 30 elephants, gay with paint and trappings and clanging with tasselled bells. Nor was that all. In the foreground stood a small, brightly apparelled group, flanked by squadron after squadron of fluttering horsemen. Alexander sent to know their purpose.

Word was brought back that an embassy awaited him from the king of Taxila, some 40 miles away, "the greatest of all cities between the Indus and the Hydaspes." The king wished to submit the surrender of his metropolis and kingdom, and, as evidence of good faith, had added 200 talents of silver and this assortment of cattle. Then and there, the Macedonian offered thanksgiving to his gods and a festival to his troops.

Four years previously, he had burnt Persepolis, the Persian capital, and he now entered India as self-appointed heir to the Persian Empire. It was nearly two centuries since the Great King of Persia, Darius, had added what is now the larger part of West Pakistan to his dominions as his Indian Province, and the usurper was, therefore, claiming no more than his own by right of conquest. But it was, nevertheless, a source of relief to him and to his much-tried army that the local king saw things in so reasonable a light. In due course, the triumphant host proceeded on its way to the submissive city.

In doing so, it was following a track that was to become familiar to the caravans of international trade. It debouched ultimately on to a spacious and fertile valley, watered on the north by a substantial river, the Haro, and by two streams of which one, the Tamrā or Tabrā Nālā, was to enter the later classical literature of the West as the Tiberoboam or Tiberiopotamos. To the east rose the foothills of the Himālayas, ridge ofter ridge of variant colour in the sunrise; westwards lay the undulating plains of the middle Indus, green with crops and intersected by the idle blue smoke of village-hearths. In front, towards the southern end of the vale, on a gentle mound lay the dun pile of Taxila itself, from which the king and his entourage were already riding to meet the conqueror.

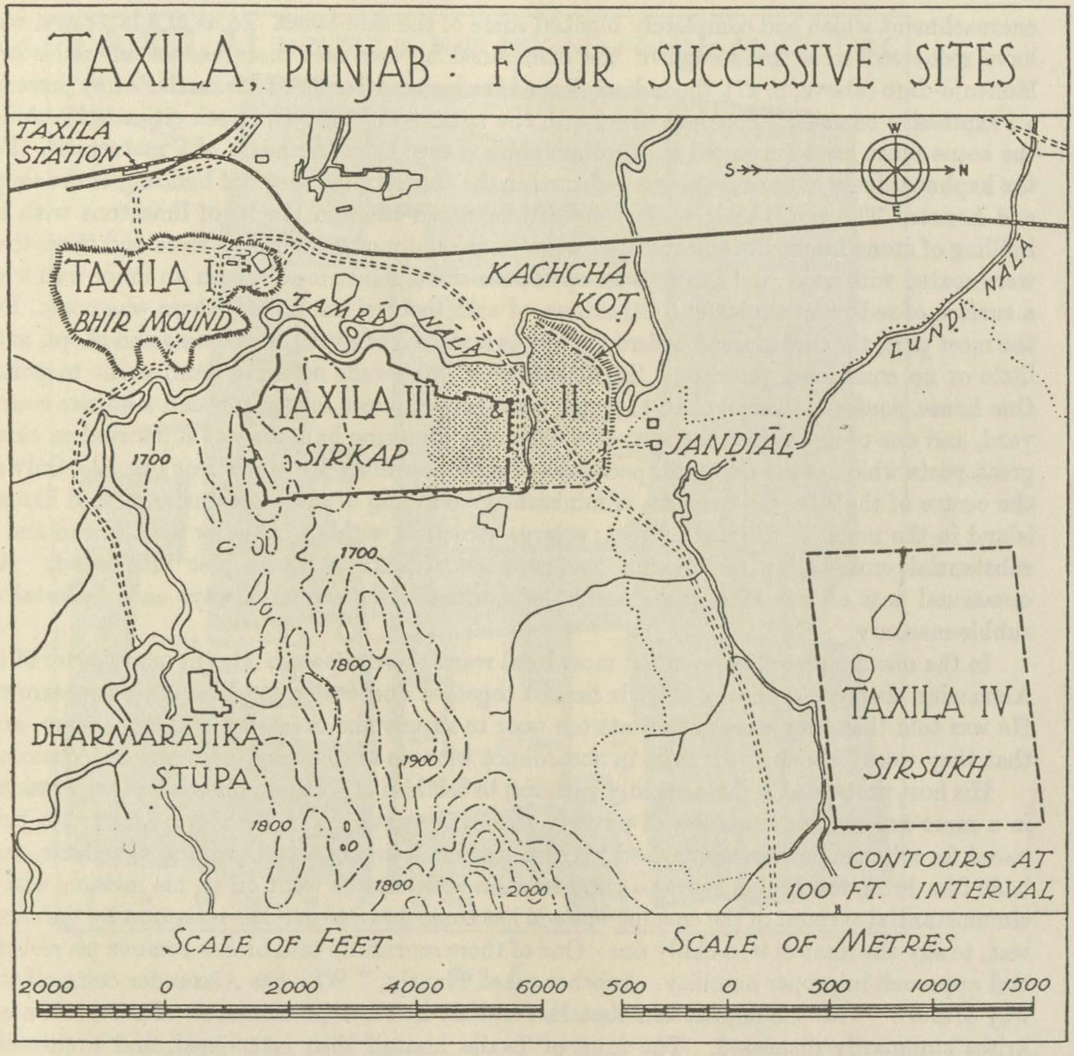


FIG. 7

Like all prescient heroes, Alexander had with him those who could record his prowess. To them we are indebted for vivid scraps of information about this episode, and modern excavators have added their quota. We know that he dealt graciously with the king and added, or promised to add, to his kingdom. We are told that once more he offered sacrifice and held games for his army. And we can picture his ceremonial entry through the city-defences which, being probably of mud-brick, have long vanished but must once have existed.

The life of the town doubtless entertained his receptive mind, but its general aspect cannot have impressed him. Outside the gates, a cloud of whistling kites and brooding vultures marked the ground where, in the Persian manner, the dead were exposed for excarnation. Near by was the spot where, as he was told, *satī* or widow-sacrifice took place. The ill-paved streets through which he was escorted were winding and of uncertain width, with irregular

encroachment which had completely blocked some of the side-lanes. To us of a later age, who have recovered some knowledge of the disciplined lay-out and maintenance of prehistoric Mohenjo-daro (above, p. 27), the indiscipline of the historic Taxila of Alexander's day presents an expressive contrast. To Alexander, with the trimness of his own Greek cities in his mind, the scene must have suggested a suburban slum rather than the heart of a metropolis. For the haphazardness of the streets was reflected in the shoddy planning and building of the shops and houses. The ramshackle walls were of unsquared random blocks of limestone with an infilling of stone fragments and mud, or were occasionally of mud-brick. Here and there they were coated with mud and through an open door could sometimes be seen an inner wall with a surface of red-painted plaster. Otherwise, of architectural adornment there was none. For the most part, the town spread before the eye as a warren of contiguous rooms and shops, with little or no considered planning. Small courts or light-wells occurred from point to point. One house, somewhat larger than the rest, was grouped more formally round a square court-yard, and one of its ranges consisted of a relatively imposing hall, its roof supported on three great posts which stood on rough pedestals of masonry along the main axis (fig. 8). Only at the centre of the city was there an administrative building of more pretension placed like an island in the midst of the main street: a large structure with an irregular apsidal end and a substantial cross-hall with wooden roof-supports similar to those just mentioned. An occasional post of this kind can also be seen in the lesser houses, always on a pedestal of rubble-masonry.

In the market-place few save the most local wares were exposed. But in one quarter of it, Alexander observed a throng of girls herded together and twittering like anxious sparrows. He was told that they were of parents too poor to supply the necessary wedding-dowry, and that they were, therefore, for sale, in accordance with an ancient and unquestioned custom.

His host proceeded, a little rapidly perhaps, to tell him of certain philosophers who resided in a more honourable condition of poverty within the environs of the city. Alexander, prepared for all emergencies, summoned his own staff-philosopher, one Onesikritos, a Cynic, and bade him bring the Indian sages to the Presence. Onesikritos went off on his mission, and a circumstantial account of the ensuing episode has come down to us. His reception by the sages was, to say the least of it, a chilly one. One of them scornfully told him to remove his clothes and approach in proper humility. Another asked bluntly, " Why has Alexander come all the way hither ?" with the implication that he certainly had not been invited. Thus was Onesikritos summarily dismissed. The king of Taxila himself then intervened, and eventually persuaded one of the sages to approach Alexander, to whom he proceeded to read a similar lesson. He threw down on the ground a dry and shrivelled hide and planted his foot on the edge of it. But when it was trodden down in one place, it started up everywhere else. He then walked all round it and showed that the same thing took place wherever he trod, until at length he stepped into the middle, and by so doing made it all lie flat. This symbol was intended to show Alexander that he should control his empire from its centre, and not wander away to its distant extremities, such as Taxila. In one way and another, the proud Westerner got little change out of the wise men of the Punjab.

These and other pleasantries enliven the tradition of the royal occasion. But we also have more tangible results of it. Prior to the time of Alexander, the cultural equipment of Taxila had been, like its architecture, of an undistinguished order. Now arrived an army bearing the plunder of Asia in its knapsack; and on its heels came the refugee-craftsmen of the broken Persian Empire, seeking new patronage in the golden East. It is no accident that in the Taxila

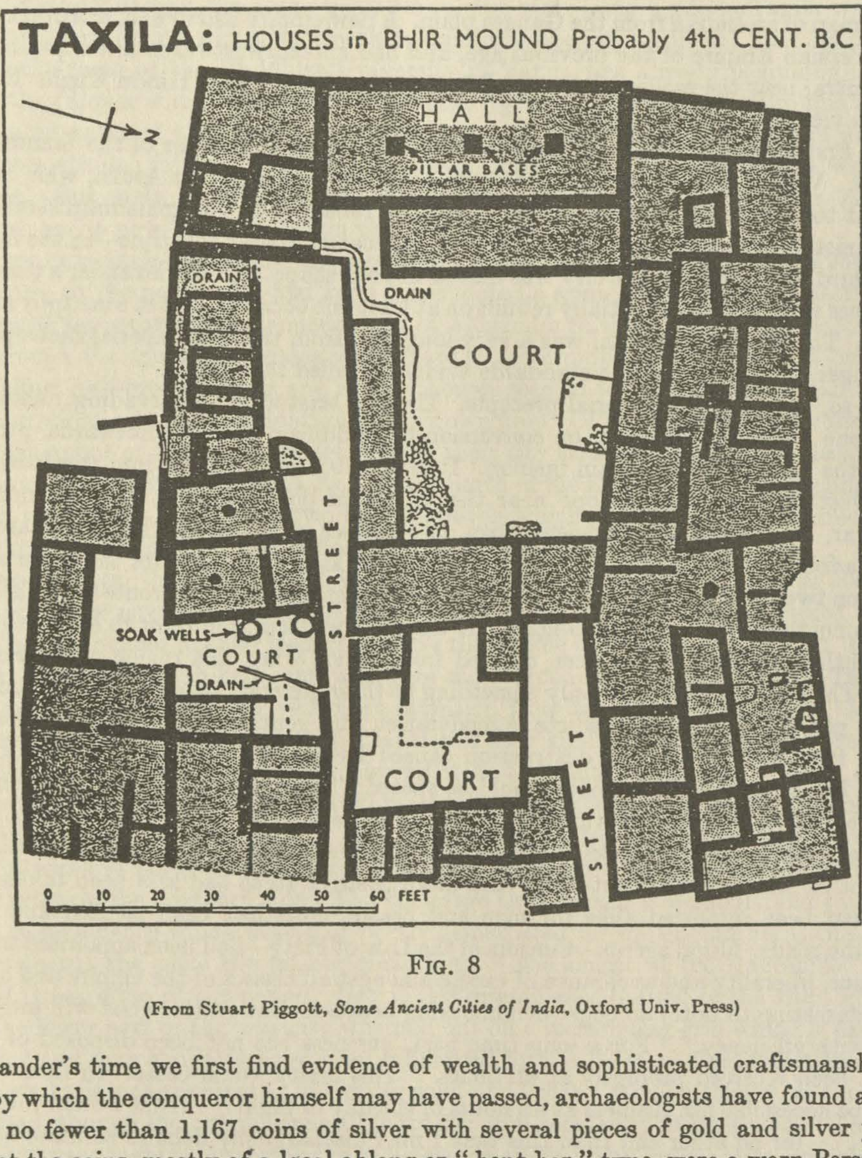


FIG. 8

(From Stuart Piggott, *Some Ancient Cities of India*, Oxford Univ. Press)

of Alexander's time we first find evidence of wealth and sophisticated craftsmanship. In a house by which the conqueror himself may have passed, archaeologists have found a pot containing no fewer than 1,167 coins of silver with several pieces of gold and silver jewellery. Amongst the coins, mostly of a local oblong or "bent bar" type, were a worn Persian *siglos*, two of Alexander the Great, and one of Philip Aridæus, of about 317 B.C. Other silver "bent bar" coins of the same kind were included in another hoard from the same stratum, with gold and silver beads and pendants and two beautiful Persian gems, each showing a lion killing a stag. These hoards and other trifles like them were the accompaniment or aftermath of the episode of 326 B.C.

In due course, the invading army passed on its way. After heavy fighting, it stood for a moment beside the Beas, on the eastern border of what is now the West Punjab; then it melted into the sunset. Three years after his entry into Taxila, Alexander lay dead in Babylon. A dozen years later, his Indian Province fell from the hands of one of his successors into the

ready grasp of an Indian from the Ganges plain. A new empire had arisen, oriental counterpart of the Persian Empire of the previous age, and had spread westwards like a prairie-fire from Pataliputra, near the modern Patna in Bihar, to the slopes of the Hindu Kush. New princes ruled as viceroys at Taxila.

The first king of this upstart empire was Chandragupta, founder of the famous Mauryan dynasty. We are here more concerned with his grandson, the great Aśoka, who, as a prince, was sent to Taxila by his royal father to quell a rebellion due to maladministration by the local ministers. Archaeological excavation has indicated that at this time—in the first quarter of the third century B.C.—the city was indeed in poor shape. After Alexander's time, many of the houses were wholly or partially rebuilt on at least one occasion, but in a scrappy and shoddy fashion. The provincial capital was a very long way from the new imperial metropolis beside the Ganges, and imperial civic standards evidently failed to reach it.

Not so, however, the imperial precepts. These at least were all-pervading. Aśoka came to the throne about 272 B.C. and, on conversion to Buddhism shortly afterwards, proceeded to spread the light in no uncertain fashion. It penetrated past Taxila, into the foothills of the north-west frontier. On a slope near the village of Shāhbāzgaṛhi, 40 miles north-east of Peshāwar, by the site of an ancient town, two masses of the native Trap-rock are inscribed with the fourteen edicts of the saintly and righteous king. And most of the exhortation is repeated on two rocks at Mansehra in the Hazāra District, beside an old route from the Peshāwar plain to northern Kashmir and Gilgit. The texts are written from right to left in the so-called Kharoshṭhī script which had been derived from Persia when this region was a Persian province. They are lengthy, and only something of their general purpose can be indicated here.

The general theme of the edicts is moderation and gentleness. This lesson the king had learned from the misery and destruction caused by his early conquest of the Kalingas of eastern India. Now even animals should be spared; " formerly in the royal kitchen each day many thousands of living creatures were slain to make curries . . . At present only three living creatures, namely two peacocks and one deer, are killed daily . . . Even these three creatures shall not be slaughtered in future." And more positive steps had also been taken. Healing herbs had been imported alike for men and beasts, trees had been planted and wells dug beside the roads. Moral agents—Censors of the Law of Piety—had been appointed to inculcate obedience, liberality and avoidance of excess amongst all classes of the empire and apparently (it is interesting to note) amongst neighbouring peoples. But all this good-will must be combined with efficiency. " For a long time past, business has not been disposed of, nor have reports been received promptly at all hours." This laxity would cease. In future the King would be accessible for business at all hours of the day or night. " Work I must for the public benefit . . . for no other end than this that I may discharge my debt to animate beings, and that, while I make some happy in this world, they may in the next world gain heaven." For better contact with his subjects, he had replaced the former royal tours of pleasure by tours devoted to piety, beholding the country and the people and proclaiming the law of virtue. Silly customs and superstitions should be abandoned. On occasions of sickness, weddings, births, departures and the like, " womankind perform many corrupt and worthless ceremonies." But the only ceremonies worth while are the ceremonies of piety, " kind treatment of slaves and servants, honour to teachers, respect for life, liberality to ascetics and Brahmans." In brief, let there be tolerance, and glorification of the Law of Piety.

But like most reformers, Aśoka was ahead of his time—perhaps more so than we today would care to calculate—and the whole fabric of his empire, spiritual and secular alike, broke

up in the years following his death in 232 B.C. His most lasting gift to Taxila was a deep-rooted Buddhism, which was thenceforth to dominate the city's cultural life. By the end of his reign, the fame of the Buddhist University of Taxila was already beginning to find its way into the *Jātakas* which enshrine the Buddhist legends, and we may picture this university as distributed amongst the many monasteries of which we shall see something in due course. Of the more secular fate of Taxila in the years immediately following Aśoka we have no knowledge. But early in the following century the decaying city on the Bhir Mound was abandoned, and a new Taxila arose on the plain across the Tamrā Nālā.

The new city arose under new management. Whilst Aśoka was ruling to the south of the Hindu Kush, to the north of it had been consolidated a semi-Greek kingdom, Bactria, which in some sense perpetuated the pioneer-work of Alexander in those parts. The Bactrians now thrust through the mountain passes and regarded the crumbling Taxila with a critical eye. The rambling, half-blocked lanes and rickety houses seemed to them beyond repair, and they chose a new, clean site for a foundation of their own kind. Of their actual handiwork we know little. A fragment of the northern defences of their city survives as a heap of decayed mud-brick, known today as the Kachchā Koṭ, to the north of the later Sirkap; and digging beneath the latter, excavators have found two building-levels which represent the Indo-Greek régime. But no complete building of this period has yet been planned.

A century later, the Indo-Greeks were swept away in turn by Scythians or Śakas from Turkestan. These new invaders had overrun Bactria and had subsequently mixed with Parthians, who now shared in their leadership. By the middle of the first century B.C. Taxila had become a Scytho-Parthian city, and was once more replanned. It is this third Taxila, now known as Sirkap, that has received most attention from the modern excavator, so that its remains are today amongst the most spectacular of their kind in Asia. It covered the southern part of the second city but stretched beyond it to the south, to include a series of broken limestone ridges and a small round flat-topped hill. The extent of the new city is marked by an imposing defensive stone wall, 21 feet wide, armed at frequent intervals by rectangular or (at the corners) polygonal bastions with solid lower storeys, and with an outer stone-revetted ledge on the northern side. The enclosure thus formed was subdivided by a supplementary stone defence which wholly or partly demarcated the upper (southern) city from the lower (northern) and gave the former something of the aspect of the "acropolis" characteristic of Greek cities of the period. Nor is this resemblance limited to the site. The street-plan of the lower part of the new city was laid out on a rectangular grid which is exceptional in the East and may similarly have been influenced by the Western civic tradition.

The new buildings are erected in a more solid and orderly fashion than were those on the Bhir Mound, though their structure still lacks the trim regularity of later work. The normal method is to use roughly coursed blocks of limestone, made up by more or less irregular fillings of limestone spalls. Most of this masonry was doubtless covered originally by a coating of mud or plaster, sometimes painted, but, even so, the general effect must have been one of plainness and monotony.

A considerable stretch of the Parthian main street of the lower city has been cleared. It has a width or 25-30 feet, runs straight southwards from the north gate and is crossed at right angles by a regular system of smaller streets or lanes (pl. VI). A majority of the buildings lining the main street were small shops raised slightly above the street-level, as in a modern bazaar. Behind them were close-set houses, some of them planned round courtyards. The scarcity of doorways in these houses suggested to the excavator that the surviving structures

represented basements and that the dwellings were normally on the first floor and were approached by stairways or ladders. Amongst other buildings accessible from the main street were half-a-dozen small Buddhist or Jaina stūpas, bearing a mixture of Greeko-Roman and Indian decoration.

Two buildings are outstanding in this quarter of the town; an apsidal temple, and the "palace." The temple, doubtless Buddhist, stands on an oblong platform approached by steps from the main street. Immediately within the platform is a range of small cells for the attendant monks or priests, and between them and the temple are the remains of two small stūpas formerly enriched by stucco sculptures. The temple itself is raised above the level of the platform, and consists of a nave with a porch in front, a circular apse behind, and a surrounding passage for ritual circumambulation. There is evidence that the nave formally contained colossal clay sculptures, whilst the apse must have enclosed a stūpa, now vanished. A small room abutting on the back of the temple-compound contained a valuable hoard of gold and silver ornaments and vessels which may have belonged to the temple, some of them bearing Kharoshṭhī inscriptions, of which one is datable to the middle of the first century A.D.

A large and massive building, thought to be the royal palace, stood in the middle of the city on the eastern side of the main street. The main block included two courts overlooked by raised halls, recalling the halls of public and private audience in Moghul palaces of much later date. The mansion was certainly of exceptional size and may at least have been the residence of a chief official of the town. But it is perhaps more likely that another large courtyard house, known today as the Mahal, secluded amongst the limestone ridges in the "Upper City" further to the south, was the actual residence of the king or governor. Here, it may be, the Parthian king Gondophares received the Christian evangelist St. Thomas who, according to a tradition as old as the fourth century, visited that king about A.D. 40.

It appears to have been in or shortly after the time of the great Kanishka, in the latter part of the second century, that the fourth city of Taxila (Sirsukh) was established a mile away on the Haro plain. A powerful and wealthy Asiatic monarch was always liable to seek glorification in the building of a new capital, and it is consistent with the strong rule of the early Kushāns that the new site, in a thoroughly pacified land, should be conditioned by comfort rather than by military needs. The fourth Taxila lay on the open plain, well clear of the foot-hills, and depended solely on its remarkable town-walls for defence (fig. 9). These are of rubble faced with coursed but largely unsquared limestone blocks, neatly filled in with coursed spalls of limestone held in mud-mortar. The wall is 18½ feet thick and has at its base, both inside and outside, a heavy roll-plinth, added to protect the foundations from the monsoon rain. This unusual feature occurs elsewhere in Indian fortification, notably in the fourteenth century walls of Tughlakabād near Delhi. Projecting from the Sirsukh wall at close intervals are semicircular towers, entered from the interior by narrow passages and, like the wall itself, furnished with arrow-slits externally splayed and capped by triangular heads. The whole aspect of these defences, which are presumably of the late second or third century A.D., anticipates that of developed medieval fortification. Incidently, they provide the earliest known instance of the use of rounded towers outside the Western world. After the middle of the third century A.D.—perhaps a generation or two later than the founding of Sirsukh—they appear in Iranian (Sasanian) architecture, probably as a borrowing from the West. It may well be that the early Kushāns, who were in close direct contact with the West (see p. 51),

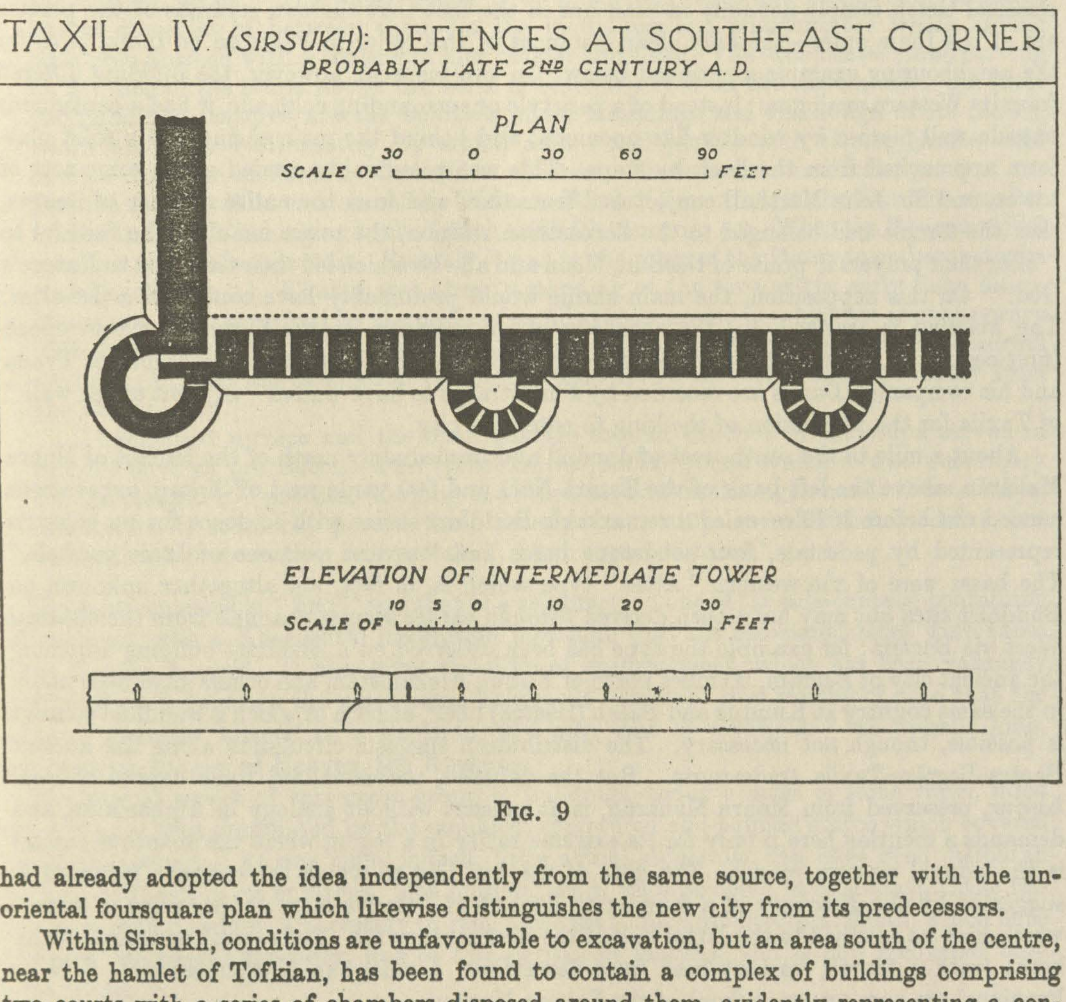


FIG. 9

had already adopted the idea independently from the same source, together with the unoriental foursquare plan which likewise distinguishes the new city from its predecessors.

Within Sirsukh, conditions are unfavourable to excavation, but an area south of the centre, near the hamlet of Tofkian, has been found to contain a complex of buildings comprising two courts with a series of chambers disposed around them, evidently representing a considerable building. In it were found coins of Kadphises II, Kanishka and Vasudeva.

Of the final fate of the fourth and last Taxila, archaeology combines with history to give us a broad hint. Everywhere in the local Buddhist monasteries the excavator has observed evidence of violent destruction at a date not far removed from the middle of the fifth century A.D. When Hiuen Tsang came this way about 630, he found a state of chaos, the royal family extinguished, many of the monasteries desolate, and the monks "very few." This condition may be ascribed in origin to the White Huns or Ephthalites who, after 450, descended upon the region and for a century consumed its resources. From this devastation the city never recovered and, though here and there Buddhist communities lingered on in some shape until the Muslim invasions, the metropolitan life of the Taxila region was now at an end.

* * * * * * *

It remains to refer briefly to some of the ancient buildings which the visitor will find in the vicinity of the four Taxilas. At Jandiāl, less than half a mile from the north gate of Sirkap, on an artificial mound, are the remains of a building which generally resembles a

classical Greek temple not only in plan but in the fact that the two columns of the portico are of the Ionic order—the only clear instances of this order in Pakistan or India, save for the neighbouring example mentioned below. In two respects, however, the building differed from its Western analogues: instead of a peristyle or surrounding colonade, it had a continuous outside wall pierced by window-like openings; and behind the main shrine was a solid platform approached from the back by steps. This was presumably carried up as some sort of tower, and Sir John Marshall conjectured from this, and from the entire absence of images, that the temple had belonged to the Zoroastrian religion, the tower enabling the faithful to " offer their prayers ir praise of the Sun, Moon and all else which led their thoughts to Nature's God." On this supposition, the main shrine would presumably have contained a fire-altar. The building is ascribed, by the character of its masonry, to the Scytho-Parthian epoch (first century B.C.-A.D.), and may be the very peristyle temple in which Apollonius of Tyana and his companion Damis are recorded by Philostratus to have waited " in front of the wall " of Taxila for the permission of the king to enter the city.

About a mile to the south-west of Jandiāl and immediately north of the hamlet of Mohra Maliārān, above the left bank of the Tamrā Nālā and 500 yards west of Sirkap, excavations carried out before 1873 revealed a remarkable Buddhist shrine with evidence for six columns represented by pedestals, four sandstone bases and " several portions of Ionic capitals." The bases were of the western " Attic " type which is, in fact, not altogether unknown on Buddhist sites but may have been derived through earlier secular channels from the classical West via Bactria; for example the type has been observed on a Buddhist building adjoining the ancient city of Begrām, 50 miles north of Kābul, Afghanistan, and others have been noted in the same country at Kunduz and Balkh (Bactra) itself, at both of which a Buddhist context is possible, though not necessary. The distribution suggests circulation along the ancient Bactra-Begrām-Taxila trade-route. But the debased, provincialized Ionic capital of local *kanjur*, preserved from Mohra Maliārān, is at present without analogy in Afghanistan, and demands a mention here if only for its extreme rarity in a region where the acanthus-capital is the normal western model. The date of the building to which the columns belonged is suggested by the discovery of a foundation-deposit of " twelve large copper coins of Azes," which may be ascribed to the latter half of the first century B.C. The capital and three of the bases (with a fourth, variant base from Sawaldhar, a village in Mardan district, N.W.F. Province) are now set up in front of the Lahore Museum.

For the rest, the whole Taxila countryside is dotted with the remains of Buddhist monasteries which doubtless, as a part of their function, constituted in the aggregate the famous Taxila university, on the analogy of the constituent colleges of a modern university. It must suffice here to refer only to two or three of them. Notable amongst them is the Dharmarājikā stūpa and monastery, to the south-east of Sirkap, with its clustering assemblage of votive stūpas of various periods, its little apsidal *chaitya* or hall, and its vast court-of-cells, later rebuilt on a smaller scale. Sir John Marshall's description of the great stūpa may be quoted.

> " The main structure, as now exposed, is circular in plan with a raised terrace around its base, which was ascended by four flights of steps, one at each of the cardinal points. The core of the stūpa is of rough rubble masonry strengthened by walls, between three and five feet in thickness, radiating from the centre. These construction walls stop short above the berm of the stūpa, instead of being carried down to its foundations, and appear to belong to a subsequent reconstruction of the fabric, which took place probably during

the Kushān epoch. The outer facing is of ponderous limestone blocks with chiselled kanjur stone let in between them for the mouldings and pilasters, the whole having once been finished with a coating of lime plaster and paint. The ornamental stone carving on the face of the stūpa above the berm is best preserved on the eastern side. Its most distinguishing features are the boldness of its mouldings and the design of its niches, which are framed alternately by trefoil arches and portals with sloping jambs, and divided one from another by Corinthian pilasters. These niches once held figures of the Buddha or of Bodhisattvas in relief. The same kind of decoration is also found on smaller stūpas on this site belonging to the fourth and fifth centuries A.D. When the Dharmarājikā was first erected is uncertain. Possibly it was in the reign of the Mauryan emperor Asoka (third century B.C.). That it was already standing at the time of the early Saka kings, Maues and Azes, is proved by the circle of small stūpas around it, which are contemporary with those rulers. But none of the visible facing is earlier than the latter part of the second century A.D., and the decoration of kanjur stone above the berm dates probably from the fifth century.

"The raised terrace and the open passage around the foot of the stūpa served in ancient days as procession paths (*pradakshina patha*), round which it was customary for the faithful to 'process,' keeping the stūpa always on the right hand. Now-a-days, the Buddhists ordinarily process three times round a stūpa or other sacred edifice, but in obedience to vows they will process 7, 14 or even 108 times."

The most remarkable "find" was that of a reliquary, in one of the side-chapels, containing a silver scroll with a Kharoshthī inscription recording that the associated relics were those of the Buddha himself. It also gives the date of enshrinement, which has been variously interpreted, and mentions the place-name Takshasila (Taxila). It is worthy of note that the dedicator describes himself as a Bactrian, and also that he mentions "the present king, king of kings, the son of Heaven, the Kushāna."

The general aspect of this great group of buildings, today a mass of stone ruins, must formerly have been dominated by the moulded, sculptured and painted stucco which covered the rough masonry. At one time, indeed, little actual stonework can have been visible in any part of Taxila or its environs. The humbler walls were rendered in mud-plaster, the less humble in stucco; and it is necessary to remember that much architectural detail, which once enlivened the rugged masonry, was of this perishable material and is now recovered only in fragments.

Today, the best example of stucco ornament still in position is provided by the stūpas and monastery which are tucked away in a cleft of the hills near the village of Jauliān, three miles east-north-east of Sirkap (fig. 10). The group includes the square base of a large stūpa, surrounded by a number of stuccoed votive stūpas and overlooking a small court framed with shrines which formerly contained clay or stucco figures of the Buddha. From this court a short flight of steps leads to the court-of-cells, on the usual monastic plan, with an assembly-hall, kitchen and refectory on the further side, above a steep slope. Each cell was lighted by a narrow loop set high in the wall, and was provided with one or two lamp-niches and with one or more large storage-pots. Stone stairs led to the upper storey, of which only fragments remain. Here and there between the cells were wall-niches containing sculptures (pl. VIIB), of which some had been in clay, unbaked until the final conflagration which destroyed the monastery in the latter half of the fifth century. We are thus presented with a relatively well-preserved Buddhist establishment of about A.D. 400-450, and the summary, mass-produced aspect of most of the stucco sculpture and ornament is what we might expect from this late dating.

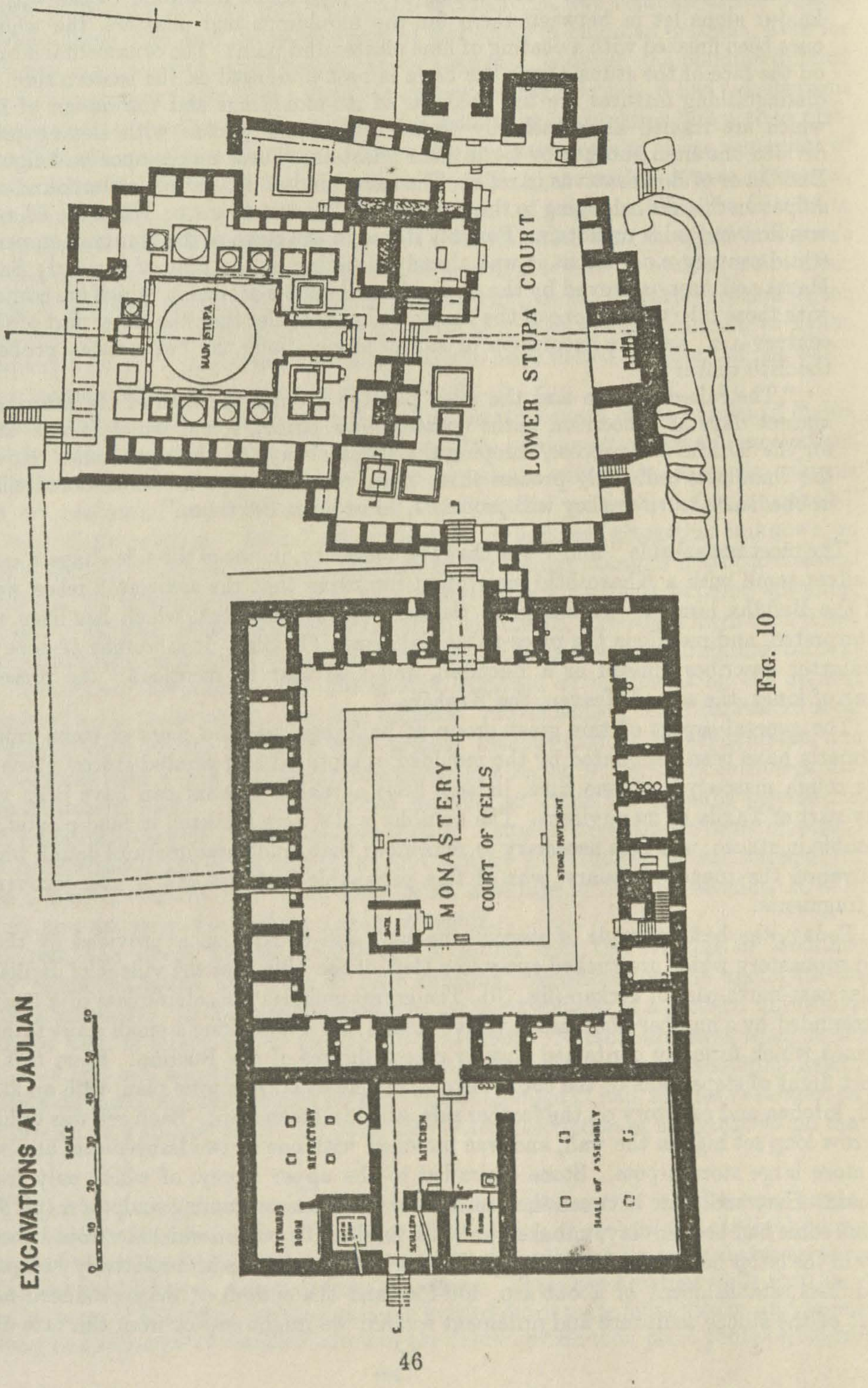


FIG. 10

EXCAVATIONS AT JAULIAN

Apart from the extensive provision of imagery, according with a developed Mahāyāna Buddhism (see below, p. 53), a significant feature of the plan is the considerable space allotted to " collegiate " purposes, particularly the hall and refectory. Buddhist monasticism was, in fact, already treading the path which was later to lead to the dissolution of medieval monasticism in other countries. In its earlier days, the Buddhist monastery had been primarily a convent of monks who sustained themselves individually by the begging-bowl and the casual alms of the faithful. Their collegiate economy must thus have been reduced to a minimum, and the monastery was in essence a focus for priests and devotees engaged selflessly upon the spiritual and symbolic teaching of the Hīnayāna creed. Gradually, as happened elsewhere, the merit acquired by patronizing the monk or his monastery assumed something more (or less) than a spiritual value, and substantial gifts and endowments from the aspiring layman turned the simple monk into a wealthy man-of-property. The monasteries became great land-owners, the begging bowl was replaced by the well-lined refectory; and this took the form of a hall, sometimes pillared, which was now added, with kitchen and store-houses, to the back of the court-of-cells. An illustration of this development is available from the famous site of Nālandā (Bihar), as recorded in the life of Hiuen Tsang in the seventh century A.D. " The king of the country respects and honours the priests, and has remitted the revenues of about a hundred villages for the endowment of the convent. Two hundred householders in these villages, day by day, contribute several hundred *piculs* of ordinary rice, and several hundred *catties* in weight of butter and milk. Hence the students here, being so abundantly supplied, do not require to ask for the four requisites " (*i.e.* clothes, food, bedding and medicine). Jauliān illustrates structurally a mature phase of this degeneration.

Another aspect of the latest epoch of Taxila may be recognized in a secluded and rocky valley at " Giri " near the villages of Kurram Prāchā and Kurram Gujar, four miles south-east of Sirkap. Here two monasteries. one of late date and the other of Parthian or Kushān origin, lie in proximity to a good spring and to a small contour-fort with semi-ashlar walls 10-11 feet thick, reinforced with semicircular bastions. The system, like the north wall of Sirkap, stands upon a ledge revetted externally as a barrier to siege-engines, although it would have been hard enough to manœuvre such weapons into position on the broken terrain. The fortification is ascribed to the fifth century A.D., partly by the character of its masonry, and partly by the known insecurity of the phase which culminated in the invasion of the White Huns. The excavator adds: " The remains of dwellings and other structures are everywhere in evidence (within the fortified area), but potsherds and the like are not in such quantities as might be expected if this stronghold was in occupation for any length of time. For these reasons, coupled with the remoteness of the spot, it may be inferred that the stronghold was intended as a place of refuge in times of need, chiefly, one surmises, for the protection of the large bodies of Buddhist monks living at the Dharmarājikā and neighbouring monasteries." A spear and arrowheads are noted amongst the finds from the locality.

Of the famous sculptures which these and other Buddhist sites in the Taxila valley have produced, something will be said in a separate chapter (p. 53).

7. OTHER BUDDHIST SITES

WHILST the Buddhist monasteries around Taxila (see above) are the best surviving series of their kind, their present priority is due largely to the extent of their excavation and preservation in recent times. Anciently their fame was rivalled and sometimes outstripped by many other Buddhist sites, particularly in and about the vale of Peshāwar. The city of Peshāwar (Purusapura) itself was probably established by the early Kushāns as their capital at a time when the Khyber Pass was substituted as the main caravan-route for the earlier and more northerly track which had followed the Kābul river from Afghanistan and had been controlled by Chārsada (Puṣkalāvatī), 18 miles to the north-east of the new city (p. 50).

KANISHKA'S STŪPA (SHĀH-JĪ-KĪ-DHERĪ) AT PESHĀWAR

In the south-eastern outskirts of Peshāwar, near the Ganj Gate, stood the mighty stūpa, the most famous of its kind, that commemorated the conversion of King Kanishka to Buddhism at this spot. Today the great building is merely a heap of dust and rubble, but according to the Chinese pilgrim Hiuen Tsang, who came here in A.D. 630, it towered above a base built in five stages to a total height of 550 feet, with a superstructure of 25 gilded copper discs. This immense tower followed, or more probably established, the tall form known to have characterized the stūpas or pagodas of later Buddism. The site was excavated in 1908-09, and the lowest of the basal stages was identified as a square of 182 feet with oblong projections, presumably for stairs, on each side and with circular projections, possibly for small stūpas, at the corners. The walls were of stone "diaper" masonry, and retained traces of stucco decoration consisting of standing Buddhas between pilasters. A remarkable discovery amongst the debris was that of fragmentary bricks bearing incised Kharōshthī lettering under a thin coating of coarse glaze, "thus giving us proof of the use of glazing at a date much earlier than has hitherto been known" in Pakistan (see below, p. 58).

In the centre, amidst the massive radiating walls which formed the structural framework of the stūpa, the excavators found a roughly constructed relic-chamber, in a corner of which stood a small cylindrical vessel—the now-famous "Kanishka" casket—made of a copper alloy. On the lid are tiny figures in the round of a seated Buddha flanked by two Bodhisattvas. In relief round the upper part of the cylinder is a frieze of flying geese; below is the main frieze with a figure of King Kanishka standing in front of an undulating garland supported by *erotes* and framing demi-figures of votaries. On the lid and sides is a punctured inscription in Kharōshthī which twice mentions the name of Kanishka and concludes with the name of the master-mason: "the servant Agiśala, the overseer of works at Kanishka's *vihāra* in the saṅghārāma of Mahāsēna." Agiśala is the Greek name Agēsilas, and, having regard to the contacts of the Kushāna empire with the West (p. 51) and the recorded fame of Western craftsmen in the orient, it is not surprising to find the Turkoman kings employing a Yavana overseer. Doubt has, however, been expressed as to whether the beardless Kanishka here represented can really be the burly, bearded empire-builder of that name, or whether a later Kanishka (II or III ?), dating from a period when the beard was less in fashion, is not rather intended. It would, indeed, seem gratuitous to separate the name of the reliquary from the great Kanishka whom tradition so firmly associated with the monument which contained it,

and the beardless figure of the king may be a deliberate attempt to indicate his youth at the time of conversion. Furthermore, as if to emphasize association with the first Kanishka, a copper coin of that king lay beside the reliquary.

Within the copper reliquary lay a six-sided crystal container with remains of its former clay sealing, preserving traces of an elephant device. In the container were three fragments of bone, doubtless relics of the Buddha.

The reliquary is now one of the treasures of the Peshāwar Museum.

TAKHT-I-BĀHĪ

Today probably the best-known monument in the Peshāwar district is the Buddhist monastery of Takht-i-Bāhī, on a rocky ridge about 10 miles north-east of Mardān. It stands 500 feet above the plain and is approached by a steep and winding path, but the visitor is repaid for his climb by the architectural diversity of the ruins and by their romantic mountain-setting. The group of buildings includes a main stūpa within a courtyard from which a flight of steps leads down into a cross-court filled with votive stūpas, whence in turn an upward stair admits to the monastic quadrangle surrounded by the cells of the monks. Alongside the quadrangle, towards the west, is a large square hall-of-assembly; whilst, to the south, the main stūpa-court is flanked by other courtyards with votive stūpas, remains of a line of colossal Buddhas formerly 16-20 feet high, and a miscellany of other buildings. The irregularity of the terrain constantly exercised the ingenuity of the builders. A part of the building-platform is extended and revetted with masonry, and an exit towards the south-west is stepped and zigzagged down the hillside beneath a pointed barrel-vault constructed on the corbel-system normal to pre-Islamic builders. The site has produced fragmentary sculptures in stone and stucco to an extent that indicates considerable wealth and elaboration, but the most remarkable feature is the design and arrangement of the range of small shrines which surrounds the main stūpa-court. These shrines, containing images and votive stūpas, stood upon a continuous sculptured podium and were crowned alternately with stūpa-like finials and with gabled *chaityas*, forming an *ensemble* without known parallel. Curiously enough, the site is not mentioned by any of the Chinese pilgrims who travelled in the vicinity.

SAHRĪ-BAHLŌL

Some 3 miles to the south-west of Takht-i-Bāhī, on the plain, the village of Sahrī-Bahlōl occupies the site of a small ancient town, from the environs of which great quantities of Buddhist sculpture have been recovered by dealers and archaeologists during the past 100 years. The extent of the ancient town is indicated by an elongated mound, today some 30 feet high, and intermittent stretches of defensive walling in the variety of " diaper " style characteristic of the first two or three centuries A.D. are visible. The site is clearly that of a small fenced town of the Kushāna period, set in a slight hollow where irrigation was relatively easy; but it has no history, and was presumably derelict when Hiuen Tsang travelled hereabouts in the seventh century.

On the surrounding plain, up to a distance of 2 miles from the main mound, a number of smaller mounds are known to cover Buddhist stūpas and monasteries. One of them may be taken as a sample of the rest. At a distance of 1,000 yards to the south, a mound was found to contain the remains of a monastery of the usual type with a small stūpa and indications of a

large one to the west. The buildings had perished in flames and had subsequently remained untouched until modern times; for a line of stone Bodhisattvas, 4½ feet high, remained in position on either side of the approach to the missing stūpa, and the stucco base of the small stūpa was found in admirable preservation. It may be that the White Huns in the latter part of the fifth century A.D. set fire to the monastery and continued incuriously upon their way; but no direct evidence as to the date either of construction or of destruction is recorded.

Half-a-dozen other mounds which have been dug into appear to have produced comparable structural evidence. The sculptures, both in stone and in stucco, reach an unusually high level of excellence. Though they vary individually in quality, they rarely suggest the mechnical mass-production which characterizes the later work, for example, at Taxila. The series from Sahrī-Bahlōl now in the Peshāwar Museum may be taken to represent Frontier Buddhist art at its best.

8. AN UNEXPLORED METROPOLIS: C̲H̄ARSADA

POTENTIALLY one of the most important ancient sites of Asia is represented by a group of imposing mounds at C̲hārsada, a village in the midst of the Peshāwar plain, 18 miles north-east of Peshāwar city. The site has long been identified as that of Puskalāvatī, the pre-Kushān capital of Gandhāra and the principal city on the old trade route from Balkh (Bactra) into India. At Balkh this trade-route tapped the main "silk-route" between China and the West, and Puskalāvatī was thus in direct contact with trans-Asiatic commerce. By way of the neighbouring Indus valley it was also within easy reach of the Arabian Sea. It was captured in 324 B.C. after a siege of 30 days by the troops of Alexander the Great, and its formal surrender was received by Alexander himself. Here also was the famous Buddhist stūpa of the Eye-Gift, and Hiuen Tsang in the seventh century A.D.—long after Puṣkalāvatī had been superseded by the Kushāṇa capital, Puruṣapura (Peshāwar), for administrative purposes—found the city still "well-peopled." Incidently, he mentions the presence of an Asoka stūpa there.

Today, the site is trisected by the streams of the Swat river, which has cut its way into the mounds and has removed or damaged a considerable portion of them. The surrounding plain is seamed by the multiple and variable channels of this small river and of the greater Kābul river into which it now flows some 4 miles below the site. Above the mixed cultivation and desert of the plain, the site now assumes the form of four main mounds, the westernmost, known as Bālā Hisār or the High Fort, towering above the others to a height of 80 feet. This great mound, unrivalled of its kind in Pakistan or India, is, nevertheless, a mere fragment and is annually diminishing. On the writer's first visit to it in 1944, the approach was blocked by processions of buffaloes carrying away the freshly quarried debris in panniers for the purpose of top-dressing the neighbouring fields. Suitable action stopped the main bulk of active damage from this cause, but the weathering of the impending cliffs of the "fort" proceeds apace.

It was on the summit of the Bālā Hisār that in 1902-3 the Archaeological Survey of India, then recently reconstituted, carried out its first excavation. At the time, vestiges of Durānā and Sikh fortifications were still traceable on the surface, extending in date as far back perhaps as the middle of the eighteenth century. To these, the excavator added fragments of a round tower and other walls of uncertain significance and mostly of Mohammadan date, including probable remains of a bath-building. One small group of walls, however, was built in the

" diaper " masonry characteristic of the early centuries A.D. in this part of Pakistan. The slight plans, as recovered, are of no consequence, and the maximum depth attained was only 20 feet.

Mīr Ziyārat, another of the mounds of the complex, situated a mile north-east of Bālā Hisār, was also trenched, and further inchoate Muslim foundations were uncovered and ascribed to a date not later than the end of the twelfth century. Three-quarters of a mile east-south-east of this, two low mounds (Pālātū and Chaz dheris) yielded slight Buddhist remains.

Of interest though its later phases be, the outstanding importance of Chārsada lies in its earlier phases, when it was a metropolitan centre of Asiatic trade and meeting-place of oriental and occidental cultures. To reach these earlier strata is the first goal of the enquirer, and we have at Chārsada an easy approach to them. The attacks of man, weather and water have, over a large part of the area of Bālā Ḥiṣār and its immediate environs, removed the higher strata to a depth of some 40-50 feet. In other words, Sikh and Muslim have alike vanished here, leaving the pre-medieval strata exposed to immediate attack. There, at the eastern foot of the " High Fort," is the obvious spot for an area-excavation designed to reach the pre-Kushān Puskalāvatī and to penetrate ultimately, perhaps, to a second Mohenjo-daro at its base. No other site is so likely to yield a complete culture-sequence from the period of the Indus valley civilization, through Vedic times, into the historic period. Set fair and square in the main gateway into the sub-continent, Bālā Hisār is itself the gate into more than one of the problems of Pakistan's past.

9. TRADE, EAST AND WEST

IN the latter part of the first century A.D., Pakistan, with the adjacent regions of Afghanistan and India, fell into the hands of a clan of the Yueh-chi, a nomad people of Central Asia. This tribe, the Kushāns, overcame the Parthians at Taxila and the Sakas or Scythians, a miscellaneous folk not altogether alien to themselves, who at that time dominated the lower Indus valley and its flanking territories. Under its most powerful king, the first Kanishka, who appears to have come to the throne sometime in the second quarter of the second century, the Kushāṇa empire extended as far as Benares on the east, into Maharashtra in the south, to the Sea of Aral in the north, and to Sīstan in the west, with main capitals at Peshāwar and Mathurā and other cities of little less importance at Begrām, north of Kābul in Afghanistan, Taxila, on the borders of the Punjab and the North-west Frontier Province, Patala and Minnagara at the head of the Indus delta, and elsewhere. The new empire thus straddled the great trade routes which traversed Asia from China to the Mediterranean and from Turkestan through the Hindu Kush to Pakistan and India. The importance of this key-position in the world's commerce is emphasized alike by literary and archaeological evidence. It was exaggerated by the tendency of the Parthians (Iranians) to screen themselves with an " iron curtain " and so to divert trade from the land routes which lay through their kingdom to long detours through the Kushān realm to the sea-ports of Pakistan and Gujarāt. For two centuries, between A.D. 50 and 250, what is now West Pakistan was busy with the transit trade of the Orient, and took its toll of the commodities that passed its way.

A merchant's handbook compiled in Greek about A.D. 60 has preserved certain historical facts relating to this traffic. From the Western world came figured linens, topaz, coral, frankincense, glass vessels, gold and silver plate, and wine. In return, the Indus-Gujarāt

ports transhipped turquoise, lapis lazuli, " Seric " skins, cotton cloth, silk yarn and indigo. A few of these goods, such as the cotton cloth and the indigo, were probably products of India and Pakistan, but others, notably the turquoise, lapis lazuli, " Seric " skins and silk yarn, must mostly have come from inner Asia and China along the caravan-route through the Peshāwar plain. At the mouths of the Indus and at Indian sea-ports such as Barygaza (Broach) these goods were landed or shipped by vessels trading with the Red Sea and the Persian Gulf where lay the ultimate ports connecting with Alexandria, Petra and Palmyra. Sometime it is to be hoped that Pakistan archaeologists will discover the sites of these precursors of Karachi—Patala and Minnagara—where this transhipment took place. It may be that one or other will be found in the vicinity of Hyderabad (Sind).

Meanwhile tangible evidence for this transit-trade is not altogether lacking. It cannot be an accident that Kanishka not only adopted types from Western mythology for his gold coinage, but also used for this the Roman standard of weight. Indeed, it has been plausibly suggested that his gold coins are, wholly or in part, actual Roman coins re-struck. Certainly, very few gold coins retaining Roman types are found within the Kushān empire, whilst the fairly abundant examples from other parts of the sub-continent normally bear a gash across the Roman emperor's head, as if at the powerful Kushāna's orders to prevent competitive circulation. But apart from this witness to contact with the Roman empire, the provincial Kushāna capital at Taxila has yielded a Mediterranean wine jar (amphora), fragments of Egyptian or Syrian glass, a bronze statuette of the Egyptian child-god Harpocrates, a vessel bearing a silver head of the Greek god Dionysus, and other objects of Western origin. These objects are insufficient in quantity to locate at Taxila any brisk or settled local trade with the West, such as has been identified at Arikamedu, near Pondicherry in South India; rather are they the sort of odds and ends that might well have been impounded by customs-officers from cargoes and caravans in transit through Kushāna territory.

It is just outside Pakistan, however, 50 miles north of Kābul in Afghanistan, that in 1937 and 1939 was found the most dramatic evidence for this arterial commerce. In the ancient city of Begrām, at the foot of the towering Hindu-Kush and close beside the ancient route connecting Pakistan and Bactriana, French excavators found a building in which were two rooms with one or more blocked-up doorways. Packed in serried masses into these rooms was an astonishing array of wares, which can now be seen in the Museum at Kābul and the Musée Guimet in Paris. Carved ivories in great quantity and of exquisite quality from India and lacquer-ware from China lay side by side with bronzes and glassware and stucco-medallions from the Mediterranean world, from Alexandria and perhaps from Syria. The glassware can be dated to the first, second and third centuries A.D., and it is evident that the collection represented an accumulation, not a single consignment. Its terminal date may be the middle of the third century A.D., when Shapur I of Iran brought the first Kushān empire to a violent end.

Here, then, is a vivid sample of that commerce which brought luxuries from China, India and the West to the highways of the Kushāna realm. It is likely enough that the Begrām treasure was, in fact, a royal depot for the storage of goods collected as dues from that trade in transit. Ultimate markets are indicated by the discoveries of Roman glass in China, of an Indian ivory at Pompeii in Italy, of Chinese pottery in Roman tombs in the European Rhineland. But it is clear that one of the principal channels through which the terminal markets were supplied lay at one time through what is now West Pakistan. In the middle of the third century, the Sasanians of Iran cut this direct route with the West. Thereafter,

trafficking did not entirely cease, but it reverted in dwindling quantity to the hands of diverse middlemen. The Kushāns no longer controlled and regimented it, and the Indus-route lost its arterial character.

10. BUDDHIST ART

IT was, doubtless, this close contact between the Kushān empire and the West that gave the famous Buddhist art of Pakistan, in and after the second century A.D., a quality which distinguishes it from other contemporary oriental schools, save in so far as these were influenced by it. This quality is a blending of Eastern with Western elements into an essentially oriental style, which assimilates its Western borrowings and derives an additional strength from them but without loss of individuality. Before describing this art, it is necessary to indicate the circumstances under which it arose.

Buddhism was, in origin, not a religion but a philosophy of life. The Buddha, the Enlightened One, was not a god; he was an inspired teacher, who, about 500 B.C., preached on the Ganges plains the Middle Path between indulgence and ascetism and sought an ultimate deliverance from accumulated sin in supreme detachment, *nirvāna*. Such was the Buddhism of the great Aśoka (273-232 B.C.), who was probably the first to encourage this way of life in Pakistan. Later, by a process of evolution natural to a land where the teacher has always been revered, the Buddha was increasingly regarded as a divine Being to whom prayer might be offered. It is usual, though not strictly correct, to distinguish the earlier type of Buddhism as that of the Hīnayāna persuasion or the Buddhism of the Lesser Vehicle, and the later type (which did not wholly supersede the other) as that of the Mahāyāna persuasion or the Greater Vehicle. The latter persuasion reached maturity in the second century A.D., in and about the time of Kanishka.

In artistic expression, the outstanding difference between these two main types of Buddhism was that during the prevalence of the Hīnayāna teaching the Buddha himself was never represented. His presence was symbolized by a chair, a footprint, an umbrella, a riderless horse. About this symbol crowd in tumultuous masses the other participants in the scene; but there is no central commanding figure. In Mahāyāna Buddhism, on the other hand, the figure of the divine Buddha controls the assembly and is the focus of its composition. Both iconographically and æsthetically, the change was revolutionary.

Artistically, this change found its first full expression in what is now West Pakistan and eastern Afghanistan. The new Buddhism, amongst other faiths, received the patronage of the liberal-minded Kanishka, and the wealth of the Kushāna empire provided a suitable environment for its development. What was lacking was any comprehensive traditional idiom in which to express the new observance; and it was here that Western art, already sufficiently familiar from the Western luxury trade described in the previous chapter, came to the rescue. In the Roman imperial West, the figure of the Roman emperor or other notable had already emerged as the dominant feature of an artistic composition. Now both this and some of its accessories and details were adapted to the Buddhist problem. Figures clad in Western clothing, Western types such as *putti* or *erotes* and garlands, satyrs, Apollos, Minervas, even an occasional scene from Western legend such as that of the Trojan horse, and Western grouping such as that associated with the state arrival or departure of the Roman emperor, found their way into the sculptors' workshops of the Peshāwar district (the ancient Gandhāra) and the adjacent region of Afghanistan. There they were, to a greater or less extent, transmuted

by the Buddhist craftsman and given a Buddhist context. The fact that the region had previously been ruled by Indo-Greek kings may have, in some small degree, prepared the way for this influx. But it seems certain that, for more than two centuries before the Mahāyāna persuasion and its art took shape, the surviving Hellenism of Bactria had dwindled to vanishing point, and the most that it can have bequeathed to the subjects of Kanishka was a faint surviving sympathy for Western things. The idiom or " language " of the new Buddhist art, in so far as it was non-native, was bred from new contacts. It is essentially a cultural by-product of the Kushāṇa commerce which brought into and through the kingdom objects of art and craftsmanship from the Roman empire.

This Buddhist art has survived mainly in sculptural form, partly in stone, partly in stucco or plaster, and partly in clay. Most of the stone sculpture is carved in a green schist which occurs in the former Gandhāra, *i.e.* the Swat valley and the environs of the Peshāwar plain. Its comparatively high " survival value " and portability have tended to concentrate attention upon it and perhaps to exaggerate its relative importance. Far more widely spread in space, and probably in time, is the equivalent sculpture in painted stucco and clay, which is found not only in Gandhāra, but far afield along the arterial routes that Buddhist monks shared with the traders through the Hindu-Kush and the Turkestans, along the China road. In Afghanistan the best-known source for this sculpture, mostly in stucco but sometimes in stone, is Haḍḍa, near Jalālābād, where there was a large Buddhist monastic settlement, but another monastery, as far north as Kunduz on the Turkestan steppe in the same country, has produced similar stuccoes. In Pakistan, twenty years of excavation at Taxila (see above, p. 45) have likewise yielded a great quantity of stucco, with some clay and stone. From other sites on the Peshāwar plain, and as far south as the monastery which surmounts the famous prehistoric city of Mohenjo-daro in Sind, stucco sculptures have been recovered. It is observable that the stucco-medium, by reason of its easy manipulation, is associated with a greater range and vividness of expression than the stonework; and, on the other hand, that this facility, and the possibility of using moulds, encouraged mass-production, particularly in the later and more decadent phases, when the use of the more laborious stone may have died out. But in origin, be it emphasized, the stone " Gandhāra " sculpture is merely a special aspect of a comprehensive stone-and-stucco Buddhist art.

For the dating of this art there is little evidence. The earliest undisputed representations of the Buddha are those on certain gold coins of Kanishka, about A.D. 150, and this date accords well with what we know of the development of the Mahāyāna observance. A terminal date is more securely fixed by the probable destruction of the Taxila monasteries by the White Huns within the half-century following A.D. 450. A considerable quantity of stucco sculpture has been found in position in those monasteries and gives us a consistent picture of the condition of the art about the middle of the fifth century (pl. VIIB). We see that it was then highly stylized but still retained clear evidence of its dual (Eastern and Western) origin. It may be doubted whether, after the fifth century, much Buddhist sculpture was produced in the northern part of West Pakistan, although there is evidence that Buddhism was not completely extinguished by the White Huns. In the lower Indus valley, at any rate, a tenuous Buddhist tradition appears to have lasted until the Islamic invasion of the eighth century. For instance at Mīrpur Khās, 42 miles east of Hyderabad (Sind), beside a brick stūpa bearing painted terracotta Buddhas, Buddhist seals of the seventh or eighth century are said to have been associated with 36 Arab coins, though considerably above the actual construction level of the monument.

The sculptures from these sites were used partly to adorn the drums of stūpas, partly in

the small shrines with which monastic settlements are strewn, and partly in the monastic courts themselves, both in special shrines and on the walls between the cells. It is remarkable that the whole of this art seems to have been employed in the interests of Buddhism, save doubtfully for an occasional Jaina patron; there is no indication that it was ever used for purely secular decoration.

Good examples of this Buddhist or Romano-Buddhist art can be seen in the museums at Lahore, Peshāwar and Taxila (pl. VII).

It remains to consider more exactly the sources of the Western element in this art. In connection with the Begrām (Afghanistan) hoard, reference has been made (p. 52) to indications that Alexandria had contributed largely to it. Alexandrian statuettes and glass, and stucco plaques such as are found at or within immediate range of Alexandria, are included, and recall the authoritative statement of Rostovtzeff that " the active agents in the exchange of goods between the Roman Empire and China were the Alexandrian merchants. Without them the commerce with India would probably not have existed." Above all, Alexandria was the principal home of stucco sculpture in the West. Adjoining the city are vast beds of gypsum, the material of which stucco or plaster is the direct product. And when, in Ptolemaic and Roman times (from the third century B.C. onwards) marble statuary was demanded at Alexandria in conformity with Greek and Roman taste, the cheap local stucco was extensively used as a substitute for the relatively costly white marble which had to be imported from considerable distances. There can be little doubt that the Alexandrian trade with the Kushān empire carried thither not merely goods and ideas but also this stucco-technique, either in the form of moulds or of craftsmen or both. Thereafter, the use of this mobile medium spread rapidly with the Buddhist monachism that travelled northwards and eastwards with the caravans, as far as the borders of China.

11. HINDU TEMPLES AND FORTIFICATIONS

WE turn now to more local matters.

None of the remaining Hindu temples in West Pakistan is likely to be as early as the Arab invasion of Sind in A.D. 711-12, but it is convenient to deal with the few ancient examples before embarking upon the Muslim period proper. They fall into two groups, both of which owe their survival mainly to geographical causes. The first or northern group, of the eighth to tenth centuries A.D., is situated amongst the barren hills of the Salt Range and the heights overlooking the Indus valley to the west and north of it; the other, of the twelfth to fourteenth centuries, lies near the southern border of Sind, tolerably secure within the fringes of the *Thar* or Desert, and may indeed be regarded as an outlier from Rajputana rather than as integral with the Indus zone.

The northern group may in turn be divided roughly into two sub-groups: an eastern, with Kashmiri affinities, aligned on the river Jhelum, which links Kashmir with the Indo-Pakistan plains, and a western, of more normal Hindu type, aligned on the Indus. The eastern sub-group lies mostly in the Jhelum district, and its best-known example is the ruined temple at Malot (fig. 11), probably the site of Hiuen Tsang's Singhapura, ancient capital of the Salt Range. The temple is typical of the four-square Kashmir style, with an elaborate recessed bay in each face flanked by fluted columns and capped by a trefoiled arch. The roof was doubtless of stone, pyramidal and stepped outwards in two or more stages, but has fallen. The columns

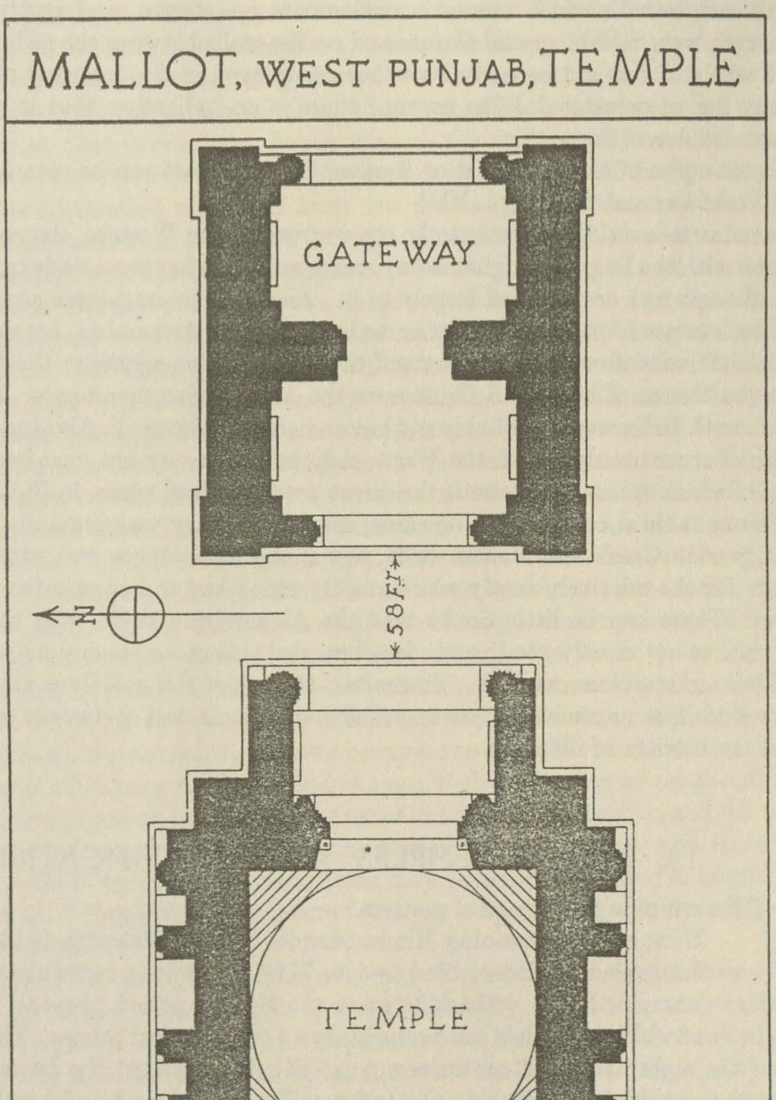


FIG. 11

(After Alexander Cunningham)

are derived from Western architecture through Buddhist channels; the trefoiled arches are Indian but also derived from Buddhist buildings in which the trefoil represented the gable of an assembly-hall or *chaitya* with side-aisles; whilst the pyramidal roof is a copy of timber prototypes designed to resist the heavy snow-fall of Kashmir. Thus, the whole design is an original and striking rearrangement of Indo-Roman Buddhist elements grafted upon a Himālayan timber-tradition. It is doubtless no accident that, towards the middle of the eighth century, the powerful king Lalitaditya of Kashmir extended his rule into the northern Punjab, including the Salt Range.

To represent the western sub-group, two examples may be selected: the so-called Kallar temple in Attock district, and one of the temples of the Southern Kāfir Kōt at Bilot in Dera Ismail Khān district. Both of these rise in the form of the convex-sided tower or *śikhara* typical of medieval North India, with a slightly projecting panelled bay in each side; and both are elaborately fretted with patterns based remotely on the *chaitya* gable described above. Both also incorporate pilasters having vase-capitals with pendent foliage in a fashion first elaborated by the fifth and sixth century Gupta architects of the northern plains. And the link with the brickwork of the stoneless plains is emphasized by the fact that the Kallar temple, although in the vicinity of good sandstone, is actually built of brick; whilst the Kāfir Kōt temples produce a similar effect with close-fitting blocks of soft, easily cut *kanjur* or calcareous tufa, bound with mortar and formerly faced with plaster. We have here, in fact, a north-westerly extension of the architecture of the Jumna-Ganges plains—doubtless as an aftermath of the westward extension of the Gupta Empire from those same plains—into a north-western style which had matured largely under local Buddhist patronage.

The remarkable Southern Kāfir Kōt or Bilōt series, together with a comparable group in the Northern Kāfir Kōt 24 miles away, deserves further comment even in the present summary context (pl. VIIIA). All save one of these temples are contained within the two fortifications to which further reference will be made presently; there are at least nine on the southern site and five on the northern. The individual temples differ in detail and doubtless, to some extent, in date, but their common features are summarized as follows in a note prepared by Sir Aurel Stein on the southern group.

> "The interior of each shrine is formed by a square cella, with dimensions up to 13 feet. By a succession of overlapping courses in the corners, the square is at varying heights reduced to an octagon from which springs a usually hemispherical dome constructed of horizontal courses. The larger shrines have invariably a high vaulted porch in front of the cella entrance. Above the cella there rises always a high and richly decorated roof, of the *śikhara* shape, representing a truncated cone with gracefully curving angles. In the case of two temples . . . which face each other as *pendants* on a common base of elaborate construction, the roof contains a second storey with smaller square cella approached by a staircase within the thickness of the main storey wall. The passage surrounding this second cella leads to another flight of stairs which is now broken but must once have given access to a third small chamber in the cupola. In the other shrines such upper storeys are absent, with a corresponding reduction in the height of the roof.
>
> "The outer side-walls of the shrines invariably show pilastered projections with a niche in the centre probably intended for the reception of a sacred image. False niches of smaller dimensions usually decorate the flanking portions of each façade. Apart from the ever-present pilasters and cinquefoil arches above the true niches, the decoration of the side-walls varies greatly in richness. . . . The roof is always the most ornate portion of the structure, being covered throughout with an intricate diaper of carvings in which a

floreate 'horseshoe' or 'bee-hive' (our *chaitya*) ornament varied by large *amalakas* plays the chief part. The whole of the boldly cut decorations, along with whatever of the outer wall-surface was left plain, was originally covered with a remarkably hard white plaster or stucco. . . .

"The survival of interior stucco decoration in the porches of at least two shrines has a special interest. That in temple C shows, above the plain stuccoed side-walls, a frieze about 3 feet high and of remarkable beauty. Between rich mouldings of unmistakably Gandhāra origin it displays a row of squatting figures within trefoil arches separated by exquisite tracery. The Buddhistic origin of these figures is quite certain."

Stein adds that in the larger temples massive wooden beams, which still survive, were inserted diagonally across the corners of the cella-walls where these bear the circular drum of the dome. Of the latter, Mr. H. Hargreaves in a further report notes that "the courses of the domes are horizontal but exhibit no features characteristic of the so-called Hindu horizontal arch, and the voussoirs of the radiating dome are clearly visible." This incipient use of voussoir-construction (compare below), combined with the employment of mortar throughout the masonry, may be interpreted either as evidence for an (early) post-Islamic date, *i.e.* a date not earlier than the beginning of the eleventh century, or, as seems more likely, a pre-Islamic infiltration of Iranian methods through the adjacent passes from the Iranian plateau. For the latter possibility, the tentative use of roughly glazed tiles on Kanishka's stūpa at Peshāwar (p. 48), several centuries before this Persian fashion was popularized in north-western India by Islam, might be cited as an analogy; as also might the use of a voussoired brick arch in a niche on the base of a Buddhist stūpa at Mīrpur-Khās, 42 miles east of Hyderabad in Sind. It is less probable that the Arab settlers in Sind and the southern Punjab were responsible for some of these innovations, though this alternative source cannot be ruled out. An eighth to tenth century date for the temples seems likely, but, in the complete absence of inscriptions or relevant coins, the stylistic evidence is unsupported and is at present an uncertain criterion.

No cult-objects remain on the surface, but there can be no doubt that these temples, in spite of the Buddhist influence observed in detail, were Brahmanical.

The southern group is concentrated in the district of Thar and Parkar. Owing to its remote position, little is known about it, and the present writer has not seen it. The best surviving member of it appears to be a Jaina temple at Gori, 14 miles north-west of Virawah, but even this example is said to have suffered from fire and gunpowder. It is built of local stone, with pillars and details of marble from Rajputana, and consists of three parts: an outer mandapa or pavilion with marble pillars and a corbelled dome, leading to an inner mandapa of similar design but supplemented by small cells, and the shrine itself, which formerly had a spire or *śikhara* of typical Kathiawar pattern, adorned with rows of miniature *śikharas*. The domes, though not uncommon on Brahmanical and particularly Jaina temples and built on the Hindu corbel-system, probably owe their emphasis to Muslim influence. That of the outer mandapa has elaborately painted figure-subjects dating probably from A.D. 1715 when, as an inscription records, the temple was repaired.

The tradition in regard to the foundation of this temple is that 500 years ago a certain man of Pari Nagar went to Patan to purchase merchandise; that, whilst there, a spirit directed him to a buried image and subsequently instructed him to take it away in a cart drawn by two calves; that eventually the cart broke down, and the ever-present spirit told the man in a dream that the image was now again underground and that he should build a worthy temple

on the site. Subsequently the idol, which had diamonds on the forehead and breasts, was removed by the chief of Virawah for safety and was kept buried save for periodical exhibition. It was last exhibited in 1824; six years later the chief died suddenly, carrying with him the secret of the burial-place.

From Hindu temples we pass to the only other surviving category of non-Islamic medieval structure of which something can be recorded without excavation. In doing so, we return to the district of Dera Ismail Khān and the two Kāfir Kōts, Northern and Southern, to which reference has already been made. The Northern Kāfir Kōt, commanding the gateway of the famous Kurram defile as it approaches the Indus valley and the Punjab plain, was described by Stein in 1905 as "the largest and most conspicuous ancient remains still above ground in the Indus valley below Attock." Since then, new rivals have risen from the soil, but the Northern Kāfir Kōt is assured of a permanent place of high, if undefined, distinction in the archaeology and topography of Pakistan. Its temples have already been mentioned, but something must now be said about its fortifications.

The Kurram valley is a natural highway from the Kābul plateau to the central Indus valley. It is significant that, in Hiuen Tsang's time (about A.D. 630), the kings of Kapisa, at the foot of the Hindu Kush north of Kābul, ruled also in Bannū, in the lower reaches of the Kurram; and in A.D. 404 another Chinese pilgrim, Fa Hien, had travelled down into India from the neighbourhood of Jalālābād by that route. For the control of trade or invasion, whether from the lowland or from the highland, the precipitous spur chosen by the builders of Kāfir Kōt overlooking the Indus near its confluence with the Kurram was a key-position.

The spur is outlined by a stone defensive wall of dry-built masonry enclosing some 50 acres of irregular terrain and armed at close intervals by round and rectangular towers, with a dog-legged entrance in the midst of the landward side (fig. 12). At least one of the towers still stands to a height of over 40 feet. Within the western end, against the defences, is a "kind of citadel" (Stein), oblong in shape and about 140 yards in length, upheld by massive retaining-walls above the general level and commanding the most exposed approach. The walls and towers are sharply sloped inward or "battered," and the latter are, in some cases, protected at the base by a revetted berm or platform, as at Taxila (Sirkap) and elsewhere. In some of the towers, where the outer skin of the masonry has fallen, an inner skin is revealed, but from the account it is not clear whether this represents (as it presumably does) two periods of construction. That such in fact is the case is rendered more likely by marked differences in the walling at various points. Some of it is of carefully dressed and coursed sandstone slabs of moderate size; elsewhere, huge roughly dressed pieces of rock, up to 6 feet in length or height, are set in courses or otherwise closely fitted in the lower portions of the bastions: near the gateway neatly cut sandstone ashlar blocks measure up to 3 feet in length and 2 feet in height, and are regularly coursed; in one bastion at the south-western end, the lower part is built of large unsquared blocks interspersed with coursed rubble in a fashion characteristic of the Kushāna period (second to fourth centuries A.D.) in Gandhāra, whilst the upper part is of a different build and doubtless represents a reconstruction.

The evidence of the defences thus suggests a long period of use, and the abundant debris of ancient dwellings of unmortared masonry, together with a great scatter of potsherds in the interior, points to the same conclusion. Apart from the temples, however, the only building of pretension noted by Stein was a two-storey structure (known locally, therefore, as the *Mari*) symmetrically confronting one of the temples. Both storeys contain windows with sloping

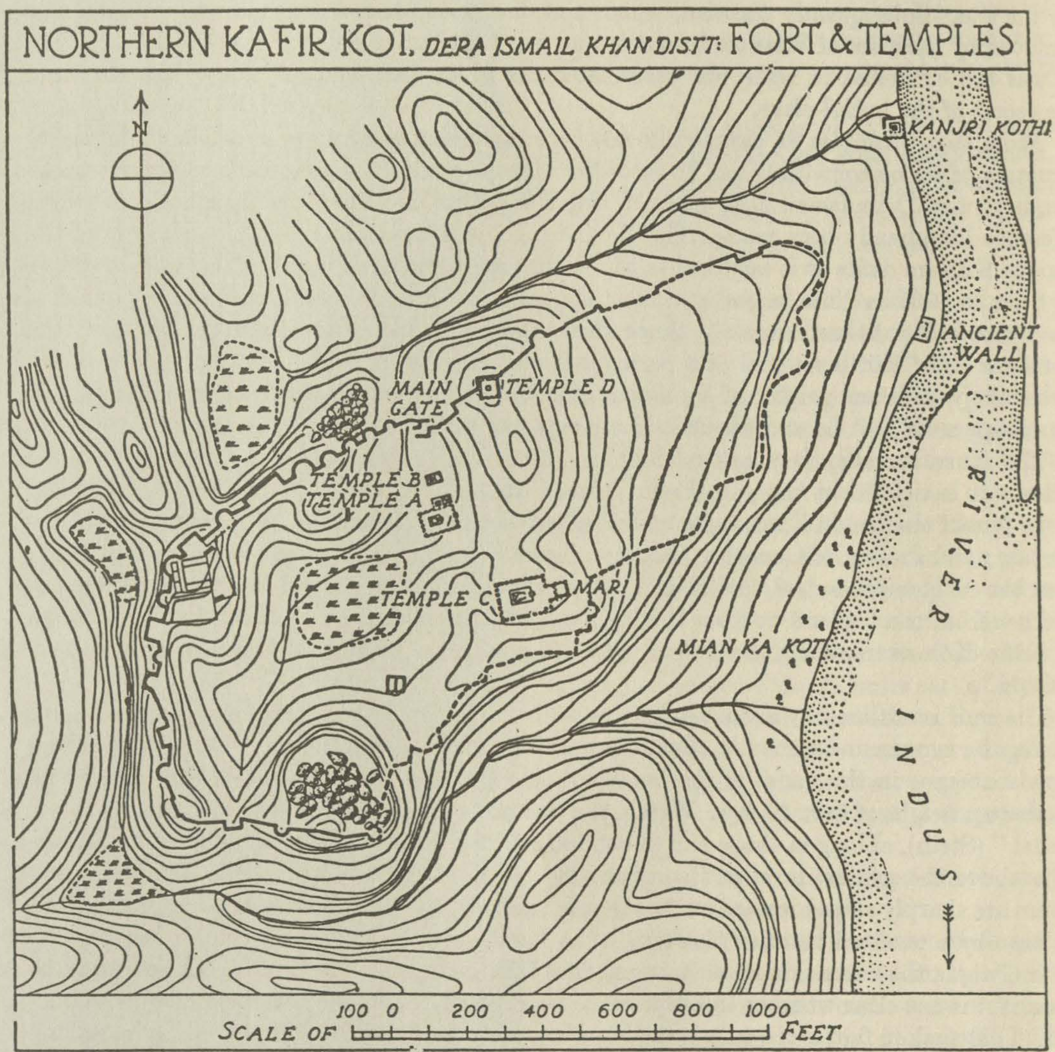


FIG. 12

jambs. Between the storeys is a string-course with tooth-moulding, but otherwise there are no traces of decoration. Floor and roof were supported by lost stone or wooden pillars.

In the absence of excavation, the history of this very notable site can only be guessed. The "Gandhāra" masonry presumably indicates a foundation considerably earliei than the Arab invasion of the eighth century A.D. The temple-architecture, as already remarked, may be as late as the tenth century. There is nothing Islamic, it seems, on the site, and the place is very unlikely, therefore, to have been held after the time of Maḥmūd of Ghaznī, at the beginning of the eleventh century. As a sequel to Taxila in the history of fortification, if for no other reason, the site is worth a limited exploration when opportunity offers.

The Southern Kāfir Kōt, below the large village of Bilōt, is also a striking fortified town-site, but of less obvious strategic value and possibly with a less prolonged or chequered history.

It occupies a small defensible plateau about 350 feet above the Indus, the westernmost branch of which flows below it. The general aspect of the fortifications resembles that of the Northern Kāfir Kōt, but the variety of detail observed in the construction of the latter has not been noted in the former. The walls are massive and faced with carefully dressed stone blocks without mortar, with large blocks towards the base. There are upwards of 22 round-fronted towers and at least two choked-up gateways; the interior is filled with a chaotic mass of crumbling structures and with the temples to which reference has been made. The remains are presumably those of a fenced border-town of the eighth to tenth century, possibly fortified by a hill-raja as the Arabs penetrated up the Indus valley. Whether that be so or not, these Arab invaders must now engage our attention.

12. THE COMING OF ISLAM

IN certain of the Persian histories of the invasion of Sind by the Arabs in A.D. 711-12, there is an introductory episode of interest. It is variously recorded, but Firishta's version is as follows:

"We are told that in those days the inhabitants of Ceylon were accustomed to send vessels to the coast of Africa, to the Red Sea and to the Persian Gulf, a practice prevailing from the earliest ages. . . . It is related also that the people trading from Ceylon became converts to the true faith at as early a period as the reign of the first Caliphs, and that, having thus had intercourse with Mohammadan nations, the king of Ceylon despatched a vessel laden with various rare articles, the produce of his country, to the Caliph Walīd at Baghdād. On this vessel arriving at the entrance of the Persian Gulf, it was attacked and captured by orders of the (Hindu) ruler of Debul (then the seaport of Sind), together with seven other boats. . . . Some of the captives making their escape carried a complaint to Ḥajjāj (viceroy of the eastern provinces of the Caliphate)."

The details of the story are of no great moment. But the reference to Muslim converts trading from Ceylon may, perhaps, be taken to refer to Arab merchants who had established more or less permanent trading-stations there and had doubtless taken native wives; and the whole setting of the incident is of value as an indication of the continuance in the eighth century of the ancient traffic between South India, Ceylon and the West. Originally in the hands of Arab and other intermediaries, that traffic had been taken under the direct control of Western merchants during the first two centuries of the Roman Empire, but had later lapsed once more to miscellaneous middlemen, amongst whom Arabs must again have predominated. It may well be, therefore, that this continuing Arab commerce, coasting past the Indus delta between the Persian Gulf and the South, served in some sense to point the way to the Arab invasion of India.

Be that as it may, at the time of the episode the Arabs were already in Makrān, within striking distance of the Indus, and their local governor was instructed to demand reparation from Dāhir, the offending Hindu ruler. Dāhir replied that the aggressors were not under his control. Armed action followed. The Caliph authorized Ḥajjāj to send an expedition against Sind, but both this and another which followed it were defeated by the Sindhis. A third, under Ḥajjāj's young cousin and son-in-law, Moḥammad bin Qāsim, then only 17 years of age, was more adequately manned and equipped. It included 6,000 Syrian horse, a camel corps, a large baggage-train and artillery, amongst which is specified a huge ballista or catapult known as

" the Bride " and operated by 500 men. When this considerable army appeared before Debul, the Bride was directed at the flagstaff which crowned the tower of the great temple of the town and had at its base a much-treasured talisman. Flagstaff and talisman were shattered, the town was stormed, and on the ruins Mohammad built the first mosque erected upon the soil of Pakistan.

The site of Debul is not known with certainty. Various writers have placed it at Tatta or at a spot some 24 miles to the south-west of Tatta. Changes of name and of the conformation of the Indus delta make guessing hazardous, and field-research has been inadequate. But a not unlikely claimant is a mound known as Bhambūr, situated on a rocky plateau 34 miles east of Karachi on the northern bank of the Ghara creek, which represents a former main delta-channel. The mound is about 30 feet high and is full of the remains of sandstone masonry, which include fragments of a defensive wall, 10 feet wide, with bastions. The interior of the enclosure was divided into two unequal parts by a cross-wall over 900 feet in length. Small corroded copper coins and masses of glazed and unglazed pottery, with some glass, can be picked up on and around the site. Amongst the pottery are sherds of Chinese celadon ware of a kind which was widely distributed over Asia from the ninth century onwards and has been found also, for example, at Brahmanābād (see below). Along the northern edge of the mound runs an ancient tank, and further north are walls and graves. It is said that other mounds lie on the southern side of the creek, and the whole area deserves investigation.

After the sack of Debul, Mohammad fought his way forward stage by stage, and Dāhir fell back on the fortress town of Brahmanābād, where he rallied his troops, prior to marching to Rāwar, for a final struggle with his opponent. The battle had been delayed by an outbreak of scurvy in the Muslim host, and the incident provides us with an interesting story of the use of dehydrated vinegar as a remedy, seemingly with success. Hajjāj, who had heard of the outbreak, had sent (with military reinforcements) wads of cotton which had been saturated to capacity in vinegar and allowed to dry. The recipients merely soaked the cotton in water, and thus extracted the vinegar. Cured and reinforced, they then advanced to meet the foe.

During the battle, on June 20, 712, Dāhir appears to have behaved with valour and determination. Eventually his elephant was scared by a naphtha ball, or an arrow to which burning cotton was attached, and fled into the river, but the king turned his animal again upon the foe and fought until another arrow struck him to the ground. He then insisted on being placed upon a horse, and charged to his death in the midst of the Arab host. The Hindus fled but were not yet beaten. They rallied again at Brahmanābād and retired thence up country, fighting as they went. Aror, the Hindu capital, fell, and after it fortress after fortress until, in 713, the capture of Multān gave the invader a foothold in the Punjab. Two years later the victorious Mohammad was recalled to Mesopotamia, where his reward was death by torture in expiation of a feud.

This is not a history-book, and the further progress of the Arab invasion need not be recounted. Suffice it to say that the tide of conquest never penetrated far into the Punjab or Rajputana. Arab ambition was not of an enduring sort. By 871, when the subjugated region was divided into two independent Arab principalities, with capitals respectively at Mansūrah (formerly Brahmanābād) and Multān, the authority of the Caliphs ceased there in all but name. It was not until the beginning of the eleventh century that the north was to fall to Islam, and then the attacking sword was wielded by no Arab but by a Turkish slave-king of Ghaznī in Afghanistan.

Of the sites mentioned in the narratives of the Arab conquest, one only has been submitted

to excavation, and even there the work was of a summary nature. Today, the famous Brahmanābād, 43 miles north-east of Hyderabad in Sind, is a wilderness of mounds of brickbats and potsherds, with occasional fragments of brick walling and remnants of defences. Tattered relics of the Muslim capital Manṣūrah, which was built on the same site, have been identified overlying the Hindu city, and include three small and undistinguished mosques and possible fragments of a larger one. Terracotta ring-wells or soakpits, such as have been common in the Indo-Pakistan sub-continent for over 2,000 years, were also found; and near the large mosque a tower-like mass of brickwork was thought to represent a Buddhist stūpa. Six miles to the north-east, at a site called Depar Ghangro, remains of another stūpa built of mud-bricks within a shell of baked bricks were also discovered. On the main site numerous coins, some of the Eastern Caliphs and some apparently local, were found in the upper layers, and fragments of carved brickwork and ivory, numerous beads, and much pottery including Chinese celadon ware (see above, p. 62) constitute a chaotic assemblage of finds. In fact, the place is virtually unexplored.

13. ISLAMIC ARCHITECTURE: GENERAL PRINCIPLES

BEFORE we turn to the Islamic monuments of Pakistan, we may for a moment glance at certain of the general principles involved.

Every living architecture is controlled by three main factors: function, environment, and the genius of its fabricators. The essential function of Islamic architecture was to provide an oriented place of prayer, a screen-wall containing a *mihrāb* or niche to indicate the direction of Mecca, generally supplemented by a prayer-hall and courtyard. A widespread secondary function was to provide a pavilion which might be used as a plesaunce for the living or a tomb for the honoured dead. Both of these basic elements lent themselves to infinite elaboration, in which regional fashion emerged. To what extent the eighth century Arabs of Sind may have introduced their western modes into Pakistan we do not know in the absence of surviving remains; there is at least no hint of specifically Arab influence in the later architecture of the country. But after A.D. 1000, from the Irano-Afghan plateau successive waves of Muslim invaders brought, from time to time, both architectural principles and decorative details which interpenetrate the Islamic architecture of the Indo-Pakistan sub-continent, however extensively they may there have been transmuted by local taste and tradition. Amongst these Iranian elements were the dominant dome, the rhythmic arcading of the prayer-chamber, and the use of brightly coloured tiles wherewith the Persian architect sought to perpetuate the glories of the brief springtime of the plateau and to anticipate the more lasting glories of Paradise. At first the strongly battered or sloping profile, which was natural to the mud-brick architecture of the western deserts, was liable to be reproduced in the stonework of its new eastern counterpart. And the use of the voussoired arch and lime-mortared rubble, brickwork, or concrete—long familiar to the West but little known in pre-Islamic times east of Iran—freed the Islamic builder from the limitations otherwise imposed by mud-brick or inferior stone in the fulfilment of his architectural function.

In the preceding paragraph the reader will already have observed that scarcely a dozen sentences can be written about a school of architecture without reference to environment. And before proceeding further we may usefully consider this matter a little more fully since, without a proper understanding of it, the *personality* of Muslim architecture in Pakistan and

India cannot be properly understood. The primary factor is this: Muslim architecture is first and foremost, with Islam itself, a product of the desert and the plateau; of broad, bare horizons, broken if at all by the hard geometry of rocky ranges. In conformity with this setting, the Iranian mosque is a simple cube or group of cubes, with rigid outlines interrupted only by a sudden mountainous dome or a spiky minaret. Within all this rigidity the surface is variegated by tilery, but the geometrical framework remains the dominant note.

Now let us turn to the new environment to which the Islamic tradition was extended by the invasions of Pakistan and India. It would be difficult to find a more completely alien landscape wherein to transplant this desert growth; for India was first and foremost a land of jungle and of close horizons. Today, with a teeming population which has probably trebled itself in a century and has to some extent been subjected to centralized schemes of development, it is difficult to realize the former extent of the vast and trackless forests in which Rāma and Sītā and the Pāndavas moved and had their being. The medieval architecture of Hindustan is fraught with the influence of its jungle-setting. Swarming, monstrous, sinister, fantastically beautiful, this tangled background is reflected in the often monstrous and sinister beauty of the sculpture which envelops the fretted surfaces of the Hindu temple; in the guarded depths of which, in the no less mysterious darkness of a small bare cell, lurks the ultimate godhead in the pallid flicker of an oil-lamp. Nothing could stand in greater contrast to this luxuriant and recondite jungle art and architecture than the solemn sobriety and open airiness of the architecture of the desert. In the whole history of architecture, there is no more fascinating episode than that of the reconciliation of these two opposite traditions.

For reconciled in great measure they were, in a multitude of different and ingenious ways. Within a century of the Muslim conquest of Delhi, the use of tiles for variegation was supplemented by a striking and original use of coloured stones and marble for the same purpose, a medium more attuned to the traditional skill of the native mason. More significant was the gradual break-up of the rigid, square outline by the addition of pinnacles and pavilions; until, in the fifteenth and sixteenth centuries, the building-profile began to assume a diversity which belongs essentially to India rather than to Iran. The diversity of the jungle had tempered the austerity of the desert. Already by A.D. 1000 the Hindu architect (for example, at Khājarāho) had learned to pile up pavilion on pavilion to "support" the great spire of his own shrines with a tumultuous crescendo of varied form. And now this principle was gradually transferred to mosque and tomb so that, particularly in the latter, the final dome no longer stood in stern isolation but emerged as the inevitable culmination of a complex but carefully co-ordinated design. The extreme development of this Indo-Islamic style was reached in the time of Akbar the Great, whose buildings at Fatḥpur Sīkrī (A.D. 1570) are a riot of Hindu fantasy within an Islamic framework.

So also, as we shall see, in East Bengal. There the acme of local encroachment upon the invading desert is represented at Gaūr by the seventeenth-century tomb of Fatḥ K͟hān, which is nothing more than a petrified bamboo hut. But between this extreme and the basic elements of Islamic architecture is an almost infinite gradation of mutual adjustments, of which some will come to our notice on later pages.

Finally, interpenetrating and transcending the other factors is that of the architect's own personality, his individual and inherited genius. This quality cannot be weighed and analysed but its presence is subject to instant recognition. In Pakistan and India, Islam set the problem and laid down a few general principles, but it was normally the genius of the locality that inspired and vivified these canons. There were exceptions: for example the lovely

tiled mosques of Tatta, isolated on the fringe of the Sindhi desert, are Iranian architecture transplanted with scarcely any modification; and in West Pakistan as a whole, by reason of its proximity to the plateau and the scarcity of good local freestone such as native Indian masonry required, the Iranian tradition always tended to maintain its ascendency. But the rule is otherwise, and there is surprisingly little in the major Islamic architecture of the Indo-Pakistan continent that cannot claim some special quality of the land and people of its adoption.

14. FROM THE ARABS TO THE MOGHULS

SAVE for the fragmentary mosques of Mansūrah, no architecture of the Arab period has endured in West Pakistan. Indeed no surviving mosque there can with certainty be ascribed to a date prior to the advent of the Moghuls in A.D. 1526. Nay more: were it not for five more or less modernized tombs of saints at Multān in the lower Punjab and one or two unimportant tombs at Makli, near Tatta in Sind, the whole architectural record of medieval Islam would here be a blank, or practically so. The circumstance is a strange one, difficult to explain unless by the supposition that the enhanced building activity of the sixteenth and later centuries resulted in a clean sweep of earlier and out-moded structures. Some of these may have been partly of timber, like the Friday mosque of Mansūrah, which is recorded to have had pillars of teak. Other early buildings may still exist, awaiting recognition. Whatever be the reason, for the present at any rate the fact remains as a challenge to Pakistan archaeologists.

In the circumstances, the historical background between the first of the seventeen invasions of Mahmūd of Ghaznī in A.D. 1001 and the arrival of Bābur, the founder of the Moghul dynasty, in 1526 need not detain us long. The new Muslim invaders were actually opposed at first by the Arab ruler of Multān, who had embraced the Ismā'īlī sect and was, therefore, regarded by Mahmūd as a heretic. It was not until 1011 that the old Arab capital finally fell into Mahmūd's hands and that his right flank was secured from the threat of his co-religionists. His far-flung seasonal raids constitute an astonishing story of combined proselytism and profit, and year after year the wealth of Hindustan was piled up in the palaces of Ghaznī: "jewels and unbored pearls and rubies, shining like sparks, or like wine congealed with ice, and emeralds like fresh springs of myrtle, and diamonds in size and weight like pomegranates." Of more lasting significance was the absorption of most of the Punjab into the Ghaznī Sultanate and into Islam. It was not until nearly a century after Mahmūd that the Ghaznavid dominion in India was materially extended, by the addition of new provinces centred on Nāgaur, over 300 miles south of Lahore.

Meanwhile, the Afghan or Iranian princes of Ghūr, a remote stronghold amongst the mountains 200 miles north of Ghaznī, had begun to threaten the Ghaznavid authority. In 1151 one of them captured and burnt the capital itself, and in 1173 Mohammad of Ghūr was established there as governor. Events followed in rapid succession. By 1175-6 Mohammad was in Multān; by 1187, Sind and the Punjab were in his hands; five years later he had utterly defeated a great confederacy of all the leading Hindu rulers of northern India at Tarāin, between Karnal and Thānesar, and Delhi and the plains of Hindustan lay at his feet. The final conquest of these regions was left to his slave-general Qutb-ud-dīn Aibak, a native of Turkestan, who, on Mohammad's death in 1206, established the Sultanate of Delhi. Thereafter, the history of

West Pakistan merges into that of North India, and need not here be pursued. We may turn to the exiguous architectural record of the period.

Of the five pre-Moghul tombs at Multān, the oldest in origin is that of Shāh Yūsuf Gardīzī, said to date from A.D. 1152. It is an oblong brick structure with flat roof and tiled exterior which has been largely modernized. In one of the end walls is a *miḥrāb*; otherwise the only external feature is the shallow projecting bay containing the main doorway. For effect, the building depends almost entirely upon the coloured geometric patterns of its tiles. Next in date is the more imposing brick-tiled tomb of Bahā-ul-Ḥaqq, who died in A.D. 1262. The square tomb-chamber has the battered or sloping walls which were to become characteristic of fourteenth-century architecture at Delhi and elsewhere, and were derived probably from mud-brick construction. The chamber is surmounted by an octagon containing clerestory windows, and above this again is a dome which, if original, is one of the two earliest examples of a true (as distinct from a corbelled) dome south of the Himālayas, although we have seen a tentative essay in that direction in the pre-Islamic Kāfir Kōt (p. 58). At all corners small pinnacles help to merge the three stages into one another, and anticipate the use of small Hindu pavilions for this purpose in later Indo-Islamic design. The fourth building of the series, the tomb of Shams-ud-dīn, erected about A.D. 1300 but rebuilt in 1780, is of comparable design. It was preceded by the tomb of Shādnā Shāhīd, who was martyred in A.D. 1270; his tomb is of a similar kind but is small and, though decayed, has at least escaped extensive restoration. The fifth tomb, that of the saint Rukn-i-'Alam, built between A.D. 1320 and 1324, on the orders of Ghiyās-ud-dīn Tughlaq, the ruler of Delhi, probably as his own intended resting place but subsequently given by Moḥammad bin Tughlaq to the sheikh, has been described as "one of the most splendid memorials ever erected in honour of the dead" (fig. 13 and pl. VIIIB). It is 115 feet high and acquires additional command from the fact that it stands on the north-western edge of the site of the old fort. It is octagonal on plan—the earliest use of this Iranian form in the Indo-Pakistan sub-continent—with a sloping minaret attached to each angle. The three stages culminate in a low dome, the outlines of which skilfully continue and co-ordinate the sloping profile of the lower structure. The brickwork is elaborately carved and is enhanced by bonds of carved timbering, whilst an extensive use of dark blue, azure and white tiles, with geometrical patterns raised from half an inch to two inches above the surface, lightens the building without detracting from its essential sturdiness. Internally, the tomb was originally plastered and painted, but only a few traces of the decoration remain. The actual sarcophagus of the saint is of plain plastered brickwork, and is surrounded by similar memorials to about 100 of his descendants. Architecturally, the tomb marks an epoch in Indo-Islamic forms, and anticipates elements which went to the making of a number of Delhi monuments during the following two centuries.

One or two other structures in West Pakistan may be ascribed to a pre-Moghul origin (p. 63) but cannot claim any high architectural status. Historically the most notable of these is, perhaps, the sarcophagus of Qutb-ud-dīn Aibak, the conqueror of Delhi, who was killed whilst playing polo in A.D. 1210. The traditional grave can be found, with difficulty, in an obscure and unworthy side-street south of the Lohari Gate in Lahore, but is modern externally.

With the advent of the Moghuls, Lahore suddenly enters the front rank of Asian cities, and must shortly engage our attention in some detail. Before turning, however, to the old capital in the days of her greatness and to the metropolitan architecture of the grand Moghul, we may pause to consider certain provincial developments in Sind, which, though mostly of the Moghul period, represent a variant ancestry and in some sense serve as a foil.

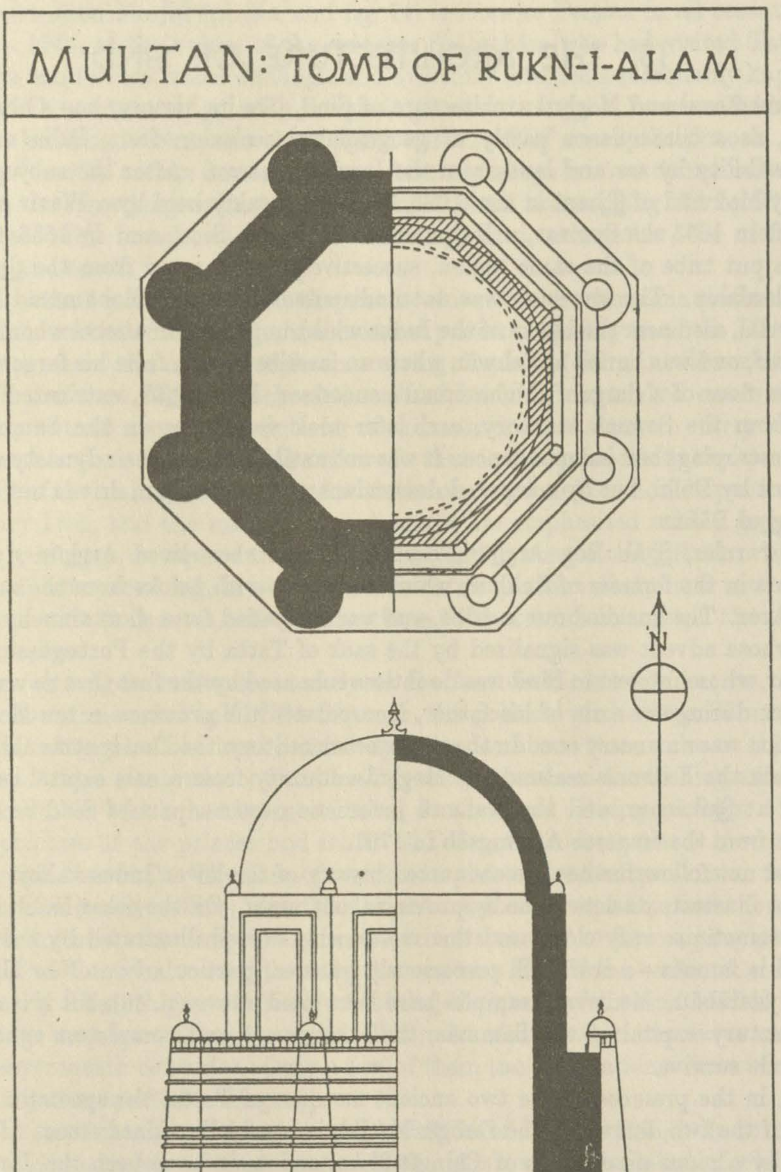


Fig. 13

(After Alexander Cunningham)

15. THE ARCHITECTURE OF SIND

THE medieval and Moghul architecture of Sind, like its history, has a character of its own, as a consequence partly of geographical seclusion from India and partly of accessibility by sea and land from the Iranian plateau. After the subjugation of the province by Mahmūd of Ghaznī in A.D. 1026, Sind was weakly held by a Wazīr established at Multān, but in 1053 the Sumras, a Rajput tribe in Lower Sind, and in 1333 the Sammās, another Rajput tribe of the same region, successively broke away from the Ghaznavid and Delhi overlordship. The secession was not undisputed. In 1351, Mohammad bin Tughlaq, sultān of Delhi, died near the banks of the Indus whilst in pursuit of a rebel whom the Sammās had sheltered, and was buried at Sehwān where an inscribed stone from his forgotten tomb lies loose on the floor of a dargah. Mohammad's successor, Fīroz Shāh, extricated himself with difficulty from the Sammā territory, and later took vengeance on the Sammās without, however, destroying their independence. It was not until 1520 that their dynasty was replaced, and then not by Delhi, but by a reputed descendant of Chingīz Khān, driven out of Kandahār by the Moghul Bābur.

The new ruler, Shāh Beg Arghūn, established the short-lived Arghūn dynasty, with headquarters in the fortress of Sukkur, which he rebuilt with bricks from the ancient Hindu capital of Aror. The line died out in 1554, and was succeeded for a short time by the Turkhān dynasty, whose advent was signalized by the sack of Tatta by the Portuguese in 1555. In 1592, Akbar, whose interest in Sind was doubtless enhanced by the fact that he was born there, at Umarkot, during the exile of his father, incorporated the province in the Moghul empire. But the union was an uneasy one. In the seventeenth century, the Daudputrās and, after them, their kinsfolk the Kalhorās resisted the Moghul authority from a new capital established by the former at Shikārpur, and the Kalhorā jurisdiction over a part of Sind received formal recognition from the emperor Aurangzēb in 1701.

We need not follow further the chequered history of the lower Indus valley. Enough has been said to illustrate its determinedly provincial character. On the other hand, its links with Iran were sometimes very close, and this relationship is well illustrated by the tilework for which Sind is famous—a craft still precariously pursued, particularly at New Hālā, 30 miles north of Hyderābād. Medieval examples have been cited above (p. 66), but it is at Tatta, the fifteenth-century capital of the Sammās, that the purest and completest examples of the Persian mode survive.

Indeed, in the presence of the two ancient mosques of Tatta, the spectator is in Persia. The older of the two, known as the Dabgīr Masjid, is in a badly ruined state. It was built in A.D. 1588 by a pious descendent of Chingīz Khān, and may have been the Jāmi Masjid or Friday Mosque until the erection of Shāhjahān's larger structure (see below). It consists of a prayer-chamber fronted by a low-walled courtyard, the former of typical Persian three-arched design, with a flat dome on a double octagonal drum over each compartment. The structure is of brick, some of the bricks being outlined in white imitation-mortar in accordance with a widespread custom of this and the following centuries. The mihrāb is of stone delicately carved in low relief. But the glory of the building is (or was) the tilework of its interior. This is purely Iranian in character, and the floral patterns in the spandrels of the two successive arches above the mihrāb, and in the borders framing the mihrāb, are rich and characteristic examples of their period. The colour-scheme is predominantly white, light blue and dark blue.

The present Jāmi Masjid (pl. XA and fig. 14) is likewise Persian in all essentials. It was begun in A.D. 1644, at the orders of the emperor Shāhjahān, who had visited Tatta when an exile from the court of his father Jahāngīr and evidently retained a reasonably happy memory of the event. The eastern range, with the great gateway, were not, however, added until A.D. 1658-59. The building is set upon a stone plinth but is itself of massive brickwork. The prayer-chamber is covered by a large dome, and the entrance-passage has two domes only less in size, ranged along the same longitudinal axis. The open court is an oblong 164 by 97 feet, and is enclosed by a double arcade, each cell of which is domed. Altogether, the roof includes 93 domes, great and small.

Externally, the façade is tiled but the rest is whitewashed, with some modern painting on the drum of the main dome. Inside, if somewhat poorer in quality than the Dābgīr mosque, the building presents the most complete surviving display of Persian tilework in the Indo-Pakistan sub-continent, whilst much of the actual brickwork is tricked out with the white edging already noticed above. The interior of the main dome is a superb starry vault in blues and white, and is the only part of the tilework that is in the mosaic technique (see p. 73). The spandrels of the main arches are filled with the conventionalized floriate patterns of seventeenth-century Iran, and the main lines and spaces are emphasized with a great variety of semi-floriate geometry on square tiles. The only jarring note is the mihrāb which, with its feeble hint of honeycombing, is at variance with its gay but disciplined setting. We are reminded again that it is as an entity rather than as an exemplar in detail that the building holds pride of place.

Tatta was already in existence as early as the fourteenth century, but its metropolitan status dates from the second half of the fifteenth. Its political predecessor, Sāmūr or Sammā-nagar, the older capital of the local Sammā dynasty, lay about three miles to the north-west under the Maklī ridge along which, for mile after mile, extends an astonishing array of Muslim tombs, to a number which has been estimated at a million. Rising amongst them are the elaborate sepulchres of the princes and saints of Tatta, the older towards the north and the younger towards the south. They are of two kinds: those of carved stone, and those of brick and blue or white (rarely yellow) tiles. The brickwork is of fine quality, and the bricks, often outlined with imitation mortar-joints, are sometimes arranged to form zigzag patterns. One of the earliest of the tiled tombs, towards the northern end of the series, is a small domed building of early fifteenth century date containing the grave of a woman called Maklī, from whom the ridge may have taken its name. But most of the major structures are of the sixteenth and seventeenth centuries. Only a few of them can be mentioned here: the whole site deserves a fully documented monograph.

One of the most notable of the stone tombs is that of Jām Nizāmu-d-dīn (or Jām Nindō) of the Sammā dynasty, who died about A.D. 1508. It is a square building, of which the dome has never been completed, and it incorporates carved stones derived from Hindu temples. Externally the principal feature is the projecting back of the mihrāb (pl. IXB), surmounted by a balcony and constituting a jumble of re-used Hindu pillars and carvings, including a miniature *śikhara*, together with Muslim panels and ornamentation. The design as a whole is architecturally in excruciating taste, but the details are of considerable interest as examples of local stone-carving of more than one medieval period. Internally, most of the decoration is Muslim, much of it in the shallow, flat technique that betrays the influence of the local tilework, which also made some use of relief (p. 66). Indeed, the carved decoration on many of the Maklī stone tombs may be described as tilework rendered in stone (pl. IXA).

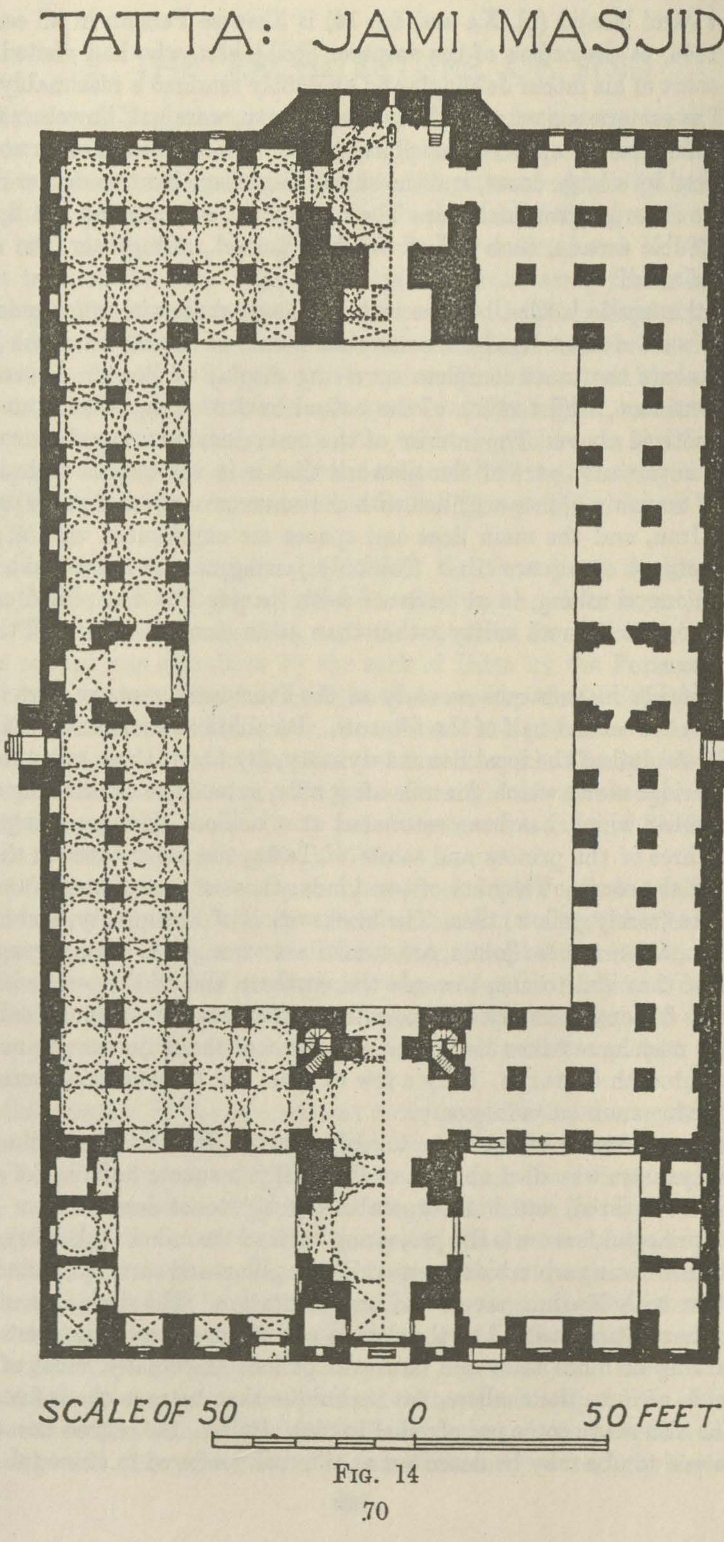


Fig. 14

Other buildings on the ridge likewise include Hindu masonry. For example, two small pavilions close to the most northerly of the great tombs, that of Sayyid 'Alī Shāh, are built mostly of carved ashlar derived from Hindu temples, including several monolithic columns. And even in contemporary Muslim work, as in a twelve-pillared pavilion covering a grave near Mirzā Tughral's tomb, the use of monolithic capitals with bracket-imposts betrays the Hindu tradition.

The largest stone building on the ridge is the great tomb of Mirzā 'Isā Tarkhān, governor of Tatta, who died in A.D. 1644. True, its grandiose scale is scarcely justified by any imaginative quality in its design. It consists of a square tomb-chamber carried up to a dome and surrounded by pillared verandahs in two storeys, the upper roofed by a series of small domes. The outlines are bleak, and the whole aspect is reminiscent of a dak-bungalow rather than of a prince's mausoleum. The interest of the building lies in the richly carved surface-tracery with which the main structure and the enclosure-walls are profusely and even extravagantly covered. Here the influence of tilework is everywhere apparent. And, for all the Hindu basis of pillar and bracket, a strong if indirect Western influence is evident also in the recurrence of honeycomb-pattern, particularly in the bracket-capitals, an element which is characteristic of Western Islam but was never very wholeheartedly adopted in India. It occurs elsewhere also on the Maklī ridge.

The brick tombs have suffered badly from the robbing of the tiles upon which their interest mainly depended. The best preserved is the tomb of Dīwān Shurfā Khān, a member of the Arghūn family, built in A.D. 1638. It is a massive, sturdy building, with fortress-like towers at the corners and a central dome, the drum of which retains some of its light blue tiles. The mihrāb has also been decorated with blue and white tiles; but the most elaborate surviving detail is the gravestone, which is richly ornamented with panels of writing and interlace.

On the whole, the Maklī tombs represent an essentially provincial school of craftsmanship which never reaches any very high level of attainment but is of interest as a mingling of vernacular tradition with imported modes. In other words, it is an exact reflection of régimes which were basically Rajput or Sindhi but were remotely in touch with Iranian ideas and fashions.

16. THE MOGHULS IN WEST PAKISTAN

Bābur	A.D. 1526-1530
Humāyūn (first phase)	„ 1530-1539
(Interlopers: Sher Shāh, A.D. 1539-1545; Islam Shāh, 1545-1553; Adalī, 1553-1554.)	
Humāyūn (second phase)	A.D. 1555-1556
Akbar	„ 1556-1605
Jahāngīr	„ 1605-1627
Shāhjahān	„ 1627-1658
Aurangzēb	„ 1658-1707

"BY the grace and mercy of Almighty God, this difficult affair was made easy to us and that mighty army, in the space of half a day, was laid in the dust." Thus wrote Bābur, first of the Moghul emperors of India, after the battle of Pānīpat, where, on an April day of 1526, his small force of mountaineers, aided by a few cannon, broke the vast, unwieldy host of the last of the Delhi sultāns. The victor of Pānīpat was inevitably the victor

of Delhi; and three years later the Moghul's dominion extended to Gwalior in the south and the borders of Bengal in the east.

The sultān who lay dead on the field of Pānīpat was Ibrāhīm, the third and last ruler of the Lodī dynasty. His grandfather, an Afghān, had been governor of the Punjab, but in 1451 had seized the throne of Delhi, which had never recovered from the savagery of Tīmūr half a century previously. And now it was to a descendant of that same Tīmūr that Delhi had once more opened its gates. For Bābur was fifth in descent from Tīmūr in the direct male line, and the blood of Chingīz Khān likewise flowed in his veins: ill-omened ancestry for a new dynasty that was, above all others, to enrich the land which it had conquered. We need not recount the intrigues which had brought Bābur upon the scene, nor the subsequent episodes of Moghul conquest. It will suffice to recall that Bābur's grandson, Akbar the Great (A.D. 1556-1605), ruled in his latter years from the Hindū Kush to the Bay of Bengal and from Kashmir to the Deccan. Within that vast and heterogeneous empire there was no real cultural uniformity, but now, for the first time since the arrival of Islam, ideas and forms began to circulate widely beyond the localities of their origin, and we can detect some semblance of a pervading Imperial Style.

Under the three Lodīs the kingdom of Delhi had flourished, and its architecture forms the local basis upon which Moghul design was subsequently elaborated. In particular, the use of small pavilions, of Hindu derivation, to lighten the outlines of a tomb-building and to " support " the main dome, although not invented by the Lodī architects, was adopted and transmitted by them. But with their unlimited resources and catholic taste the Moghuls effected nothing short of a revolution in the Indian scene. More than any other line they succeeded, not merely in implanting their own ideas, but in getting the best out of the traditional genius of their native workmen. In doing so, they received as much as they gave, and at its best their architecture presents perhaps the most brilliant and satisfying composition of opposite elements in the whole history of building.

In Pakistan, it is at Lahore that the most substantial relics of their architectural achievements remain. There we have on the grand scale examples covering the whole range of the metropolitan style of the Moghuls. This was evolved primarily in the time of Humāyūn, the second Moghul, and at the outset included four main features: (i) an increasing preference for the bulbous double-dome in work of the highest class; (ii) the liberal use of pavilions of partially Hindu extraction to crown minarets, " build up " domes (see above), and break the rigid lines of the great gateways which are a feature of the mosques and fortresses of the period; (iii) the use of oriel windows which again owe much to Hindu woodwork and masonry; and (iv) a fondness for the rich red Mathurā sandstone, the surface of which might be varied by patterns inset in white and black marble and grey or yellow stones from various sources. In this last feature again, the invader was making free use of the superb skill of the native mason, and the polychrome stonework of Moghul architecture became in some measure the Indian counterpart of the variegated tilework of Iran. Indeed, so generously was the Hindu mason encouraged by his earlier Moghul employers that in the time of Akbar architectural detail was predominantly Hindu and included elements such as animal-forms which were normally excluded from the Islamic repertory. In the time of the fourth Moghul, Shāhjahān (A.D. 1627-58), there was a partial reaction against this catholicity, and a new Court Style came into being, based upon a liberal use of glistening white marble in preference to the somewhat heavy Mathurā stone, of elaborate multi-cusped arches, of inlaid flower-patterns of an exotic type, and, particularly at Lahore, of mosaic tilework of Iranian origin. This elegant aristo-

cratic style culminated in the Tāj Maḥal and many exquisite buildings in and about the fortresses of Agra, Delhi and Lahore. Later again, under the more ascetic rule of Aurangzēb (A.D. 1658-1707), there was a further reaction, this time towards a simplicity which may possibly be ascribed as much to an increasing lassitude on the part of the architect, as to deliberate discouragement on the part of his patron.

A further word may be added about the mosaic tilework which lent so much colour to Lahore architecture in the second and third quarters of the seventeenth century. From the thirteenth century onwards, variegated tilework had been popular in Sind and the lower Punjab, which were accessible geographically to influences from the west and were at the same time cut off by desert from the east. Examples of the thirteenth and fourteenth centuries have been noted at Multān, and others of the sixteenth century are to be found at Lahore itself, and, above all (as we have seen), at Tatta. Now it may be recalled (p. 69) that Shāhjahān had visited Tatta as an exiled prince and had there doubtless worshipped in the beautiful tiled Dabgīr mosque, which was probably then the *Jāmi Masjid* or Friday mosque, of the place. That the occasion had favourably impressed itself upon his mind is likely from the fact that he later established there a new and larger *Jāmi Masjid* in the same Persian tiled technique. Certain it is that this form of decoration attracted him, and that under his patronage occurred a remarkable renaissance of the craft at his nearest capital, Lahore. The beginning of the renaissance is marked by a sudden efflorescence of tilework of a very notable kind and quality on his additions to Lahore fort (p. 80), dated by inscription to A.D. 1631-32, although the tile-panels in Jahāngīr's tomb must have been nearly contemporary. Thereafter, in the thirties and forties of the century, building after building in the vicinity of Lahore displayed the work of this new school of tilery. The introduction of human and animal subjects which distinguished the tiling on the secular fort-wall was not, so far as we know, repeated, and would in any case have been inappropriate to the mosques and tombs which constitute most of the other surviving examples; but floral patterns and borders which combine a great variety in detail with the general stamp of a single group of workshops became almost a matter of routine in the formal architecture of the Lahore court. Impetus carried the fashion into the earlier decades of Shāhjahān's puritanical successor, Aurangzēb; a small mosaic-tiled mosque near the site of the Taxali Gate is said to have been built in A.D. 1673, and tiling was somewhat half-heartedly applied to the upper part of Dāi Anga's tomb in A.D. 1671. But, by the latter part of the century, the great days of Shāhjahān's school were over, and, in so far as tilework remained in vogue, there was a general reversion from mosaic-work to the older and easier technique of painted square tiles of standard sizes.

A further word may be said on this question of technique. As the term indicates, in mosaic tilework the small colour-units are each cut to the shape required and fitted together to to form the pattern, the individual tile being of a single colour. This technique is restricted primarily to Persia and secondarily to north-western India. In the former country it was perfected at least as early as the fourteenth century; in India, perhaps the oldest example is a simple geometrical mosaic pattern on the dado of the early sixteenth century tomb of Maulāna Jamālī near the Qutb at Delhi, though it was not until after the middle of the century, in Akbar's reign, that this type of decoration began to take root, as in the ruined Khairu-l-manāzil mosque (A.D. 1562) near the Delhi Purānā Qil'a. By that time the white and blues which had alone been used on the square tiles of the thirteenth and fourteenth century at Multān had been supplemented by yellow and green, but naturalistic patterns, although familiar in Persia, had not yet appeared in the mosaic technique in India. It was the further

elaboration of the colour-scheme and the widespread use of naturalistic floral mosaic that, under continued Persian influence, marked the contribution of the seventeenth century craftsmen of Shāhjahān's Lahore.

At first the Lahore school may well have derived some of its subject-matter from mural painting, which was ahead of it in naturalistic development. If so, it proceeded to outshine its master. In the mosque of Mariam Zamānī built in A.D. 1614, in Jahāngīr's reign, the decoration is exclusively painted and is of the highest quality (p. 83). A quarter of a century later, painting is normally subordinate to tilework or inlay, and its quality has deteriorated; the delicacy and *curiosity* of the Mariam Zamānī painting have given place to coarser brushwork and more conventional types. On the tiled buildings it is usually confined to the somewhat awkward intricacies of half-domes (although even here tiles are often used), to subordinate niches, to back-elevations and to interiors. The stronger and indeed more architectural quality of tilework dominates the field.

Another accompaniment of the fashion for tilework was a tendency to restrict the architectural development of the buildings thus decorated and to approximate them more closely than was otherwise normal at this period to the severity of traditional Iranian forms. The strength and firmness of mosaic tilework brook no rival. All that is required is a plain wall on which to hang it, as one might hang a Persian rug from a balcony on a fête-day. Hence, alongside new architectural enterprise, there was during the prevalence of the Court Style of Shāhjahān a constant recurrence to Iranian convention. A notable example of this is Wazīr Khān's mosque, built in 1634 at Lahore (p. 85). Here, there are indeed specifically Indian elements. The design is dominated by four great octagonal minarets each terminating in a semi-Hindu pavilion, and the great gateway has two oriel windows and two more pavilions likewise of Indian character. But for the rest the outlines have the simple austerity of those of a Persian mosque, and the building depends for its interest upon the rich Persian mosaic tilework which these outlines frame. It is in effect a scaffolding for the display of richly variegated ornament. Purists sometimes object that such use of a structure as a mere hoarding for structurally irrelevant decoration is contrary to "one of the fundamental usages of good building." The objection is without weight. There is here, in fact, no visual conflict between the architecture and the decoration. The elementary functional lines of the former at once allay all anxiety in the mind of the spectator as to structural problems and lease his attention for non-structural interests, without which the building would have, and is intended to have, almost no æsthetic appeal. For its purpose and its place, the quiescent satisfaction which the design thus produces is its complete justification and its glory; and the dissatisfied spectator, if such in fact there be, is at liberty to depart westwards for the restless battleground of a Gothic cathedral—and to stay there. He has no understanding of the East.

ROHTĀS FORT

In West Pakistan, the earliest characteristic work of the Moghul period was, in fact, built by the Afghān interloper, Sher Shāh Sūrī, who usurped the throne of the second Moghul emperor, Humāyūn, in A.D. 1539, carried out a number of important constructive works in Delhi and the Punjab, and was eventually buried in a remarkable and famous tomb at Sasarām in Bihar. The most important surviving structure of this reign in the West Punjab is the great fortress of Rohtās which sprawls along a commanding ridge 12 miles north-west of Jhelum. It was named from an ancient and redoubtable fortress in western Bihar, where Sher Shāh had ousted the Hindu ruler in A.D. 1539. The new site

was chosen with skill for a double purpose: to bar the possible return of the deposed Humāyūn, who fled to Sind and subsequently to Persia, and to control the exile's nearer potential supporters, the turbulent Gakkhars, north of the Salt Range. Prior to the construction of the Grand Trunk Road, Rohtās lay already on the main road between Lahore and Peshāwar, and a relic of former traffic between the mountainous country north of the Salt Range and the plains south of it is preserved in the remains of a Moghul *serāi* about a mile to the north of the fortress. The broken country hereabouts tended to canalize such traffic along the defile beside the ridge, and, but for the accidents of history, this strongly built western outpost of Hindustan might easily have played a highly important strategic and tactical rôle. In the event, it never stood a siege, and its best title to fame is that it supplied the emperor Jahāngīr with some particularly succulent partridges when he halted there, as he did more than once during his journeyings.

For the general design and present condition of the fortress, the description in the *Punjab District Gazetteers* may be quoted:

> " The fort of Rohtās has a circumference of about 2½ miles, and a dividing wall in addition, about ½ mile long; the walls are at their base, in many places 30 feet thick, and from 30 to 50 feet high: there are 68 towers or bastions and 12 gateways, and the walls are everywhere pierced for musketry or archery; and here and there for cannon: in the parapets near the gateways are machicolations, from which molten lead could be poured on attacking troops. The fort has never stood a serious siege, and even in medieval warfare would have taken a large army to hold it, for some of the gates are remarkably easy of access and but poorly constructed. It is now in parts ruined, expecially on the north side, where a considerable section of the walls has collapsed; in other places the foundations of soft sandstone have worn away, leaving the walls supported only by the excellent mortar with which they were constructed. Many of the gateways are, however, still imposing, the finest being the Sohal Gate facing Tilla, which is over 70 feet high: the balconies on the outer walls of this gate are fine specimens of the work of the time, and the whole gateway is perfect in spite of the use to which its upper part has been put as a district rest-house (see pl. XB). The best gateways after the Sohal Darwāza are the Khwās Khānī, where the road from Jhelum enters the fort, and the Langar-khāna, on the north side. The northern part of the fort is separated from the rest by an interior wall, much the same as those on the outside, so as to form a kind of citadel (*andarkot*): within it is a small high building of incongruous appearance, said to have been erected by Man Singh in the time of Akbar. The fort contains two *bāolīs* or wells with long flights of steps on one side giving access to the water, now no longer to be found in them: the citadel contains a small ruined mosque of the same period as the rest of the fort: and there are several inscriptions over gateways, but nothing of importance."

It would appear that no extensive residential buildings were ever constructed within the fortress, and the most elaborate architectural features are the gateways referred to above. They are built of fine ashlar, and consist of an archway set in a tall arched recess, which is flanked by oriel windows carried on Hindu brackets (pl. XB), the whole combining moderate strength with grace in a manner that was to characterize the mature Moghul architecture for a 150 years.

OLD LAHORE

But it is in Lahore and its environs that Moghul architecture is most richly and completely represented in Pakistan. Lahore is recorded to have been at one time a dependency of the great Lalitaditya, king of Kashmir (eighth century A.D.), and may have been the capital of a

Rajput state, but its pre-Islamic history is nebulous and does not concern us here. In A.D. 1022-23 it was seized by Maḥmūd of Ghaznī, and thenceforward had a chequered career of no great distinction—even Tīmūr, it is noted, handed it over to a subordinate to sack—until the Moghuls selected it as a capital city in the sixteenth century. Archaeologically, its story begins at present with their régime. There is no doubt that careful burrowing into the high mound or *tell* on which the Moghul fortress stands would extend our knowledge backwards to an incalculable extent; and beneath the old city are the accumulations of some, at least, of its predecessors. But, pending excavation, our material knowledge of Lahore begins with Akbar's fortified palace.

Akbar is credited, too, with the city-walls, which were reconstructed by Ranjit Singh in A.D. 1812, and are said to have been 30 feet high but have almost completely vanished within the last 50 years. They are shown as complete on a town-plan of 1863 in the Punjab Record Office at Lahore, and their outline is still intact, save for the north-west corner, on the 6-inch Survey map of 1891 (fig. 15). The walled area was 1¼ miles from east to west and upwards of ¾ mile from north to south, and formerly abutted on the river Rāvī, which has moved north wards since the middle of the seventeenth century. The town-defences approached the fortress to the north of Akbar's east gate, and on the other side joined the north-western corner of the Bādshāhī mosque-enclosure which thus, from Aurangzēb's time onwards, constituted a part of the defensive system.

Today the actual structure of the town-walls is represented only by rare fragments. The junction with the Bādshāhī mosque is indicated by a short length of Sikh brickwork a few courses high, with the base of a small semi-octagonal tower or buttress. A scrap of the brick core of the south-west corner-tower and a few yards of brick wall with a round-fronted tower immediately south-west of the Delhi Gate can still be identified, together with 100 yards of mixed brickwork to the west of the Sherānwāla Gate. The course of the ditch, which is said to have been dug or re-dug by Ranjit Singh and to have been faced with brick, is represented by a continuous stretch of more or less derelict garden, and the inner brick wall of the sewer which marks the former frontage of the wall in the south-western quarter is probably a fragment of the old ditch-revetment. Of the thirteen gates, only Aurangzēb's Roshnāi Gate, which opens from the north into the Ḥaẓūrī Bāgh between the Bādshāhī mosque and the fort, remains much as it was built (A.D. 1673). It is of simple design, flanked by semi-octagonal plastered and panelled towers and crowned by a dome which was rebuilt by the Sikhs after the collapse that caused the death of Kharak Singh, grandson of Ranjit Singh, on the day of his accession in 1840. Of the other entrances, seven are still marked by structures mostly of relatively modern date. A great four-centred arch, partly filled in with later work, on the inner face of the Delhi Gate may be as old as Akbar, but the building is otherwise of the nineteenth century, with a monumental colonnaded front in European style. The Bhātī, Kashmīrī and Sherānwāla or Khiẓrī (ferry) gates are formal and unimposing substitutes not earlier than the middle of the last century, and the Akbari Gate is as late as 1886-87. The Lohari and Shāh 'Almī gates are mainly of Sikh workmanship restored in 1863-64. The former has semi-octagonal towers and a plastered front with decadent ornament of Moghul ancestry, and the Shāh 'Almī, in spite of the derivation of its name from that of the son of Aurangzēb, is of the same type but with round-fronted towers. Externally at least, the old city has little to show of its antiquity.

Within the walls there is more of interest. There is no evidence that the town was ever systematically planned, and the present narrow, wandering streets with picturesque im-

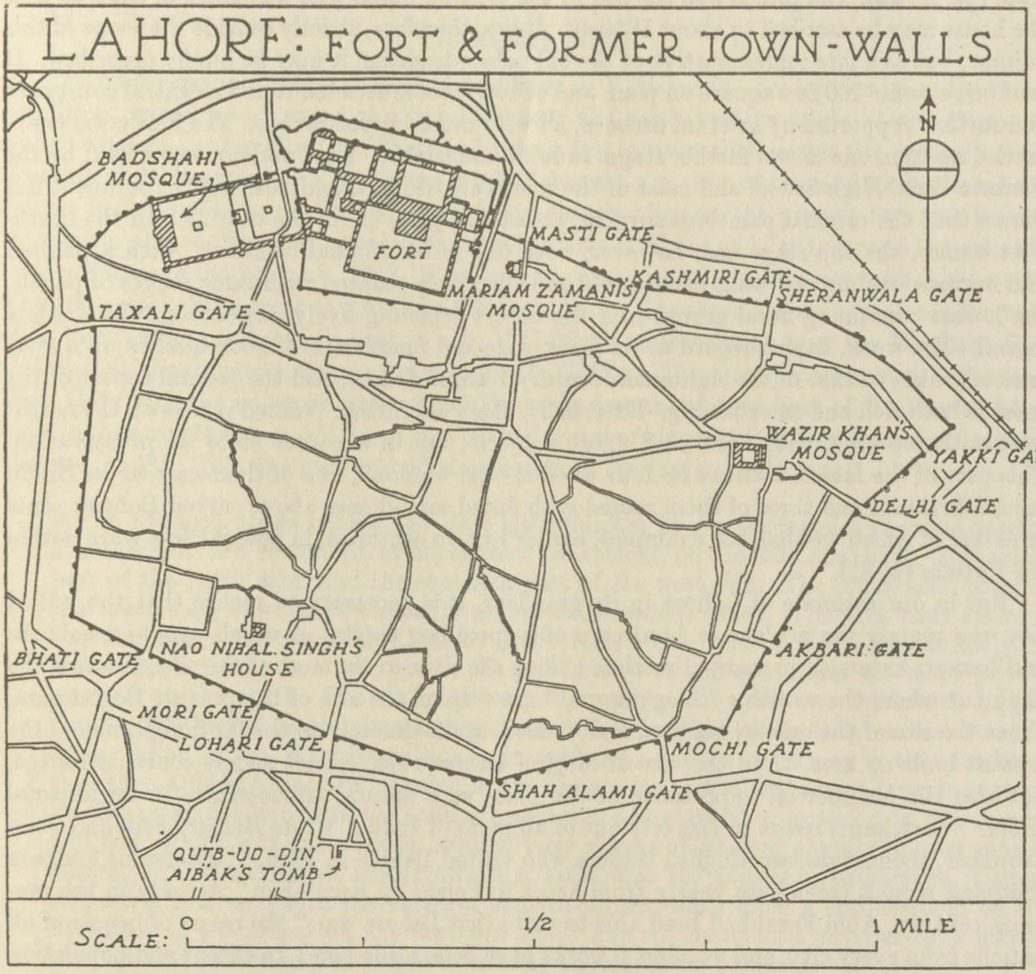


FIG. 15

pending houses and shops in various stages of decay probably follow traditional lines. Here and there survive a few buildings which give some impression of the architecture of the city in its prime. Elaborately carved wooden doorways, window-frames and shutters such as occur, for example, in ruined houses up a narrow alley off the Waccho-Wālī street in the Gumtī Bazaar area, are relics of the fine carving which the Moghul period adapted from the Hindu tradition, and may be ascribed to the beginning of the seventeenth century if not earlier. Similar examples are preserved in the Lahore Museum, but such survivals are now few and are rapidly vanishing (pl. XVIA). Most of the older buildings are of the late Moghul type which the Sikhs adopted, and date from the end of the eighteenth and first half of the nineteenth century. At their best, these survivals are rich and attractive, if overwrought, examples of the style in its baroque decadence, as applied to houses on cramped city sites. Of the *havelis* or palaces which at one time gave a greater spaciousness to certain parts of the town, the finest surviving example is that of Prince Nao Nihal Singh, a furlong north of the site of the Mori

Gate (pl. XVIB). The prince was the son of the Kharak Singh who was killed in 1840, so that the house may be ascribed to about 1830-40. It lies, therefore, strictly outside the scope of this volume, but as a late representative of the old palace-tradition it may be briefly described. It is of brick, some 100 feet square on plan, and of two storeys arcaded round a central courtyard and further supported by internal arcades, all with multi-cusped arches. The four corners are carried up from one to two further stages in brick and timber. The building is now used by the Victoria Girls' High School and most of the rooms are whitewashed, although experiment has shown that the original paintings survive, at least in part, under the coating. In the north-west corner, the top stage has, however, been left in its original condition, with a painted and mirrored ceiling and walls elaborately and effectively painted with three ranges of panels, the lowest containing floral groups and the others depicting lively scenes from the Krishna legend. The work, having regard to its place, date and function, is of good quality, in a style remotely akin to that of the eighteenth century Kangra School, and the general aspect of the room is both rich and entertaining. Externally, there are further painted panels on the north-west entrance-wing, with floral and figure subjects, but in a poorer state of preservation. This part of the facade carries also four wooden oriel windows, two of them carried on Hindu animal-brackets and three of them roofed with fluted semi-domes above curved Bengali pents or eaves, of which we shall see examples, earlier by two centuries, in Shāhjahān's work within the fortress (p. 82).

But in our estimate of Lahore in its grandeur, it is necessary to realize that the walled city was merely the nucleus or hard core of a spreading capital of which populous suburbs and bazaars extended in many directions: along the river to the west of the city, towards the Shalimar where the wealthy " Moghulpura " grew up on the site of the present Begumpura, about the site of the railway-station, and, indeed, approximately to the far-flung limits of the present built-up area. And the size of Moghul Lahore reflected not merely court-patronage, but also the commercial importance of the place as a natural traffic-centre in an imperial India. " Merchants resort to this city out of all parts of India," wrote Richard Still and John Crowther, themselves two English traders who visited Lahore in 1626. " Twelve or fourteen thousand camels laden pass yearly from hence to Persia by Kandahār." Already in the previous century, Abul Fazal had been able to write that Lahore was " the resort of people of all nations from every city, and wonderful works have been made here. In extent and population it far surpasses the average." " The choicest productions of Iran and Turan," he adds, " could be had here." In 1641 the Spaniard, Sebastian Manrique, observed that the population, permanent and temporary, far exceeded the capacity of the town. " Lahore," he wrote, " is large and capacious, but . . . there were not houses enough for the accommodation of the people, who were encamped for half a league outside the city. It is handsome and well-ordered, with large gateways and pavilions of various colours. I entered the city, a very difficult undertaking on account of the number of people who filled the streets, some on foot, some on camels, some on elephants, and others in small carts, jolting one against the other as they went along. Those who best could, passed first. This being the receiving hour at Court, many of the gentry were proceeding there, accompanied by as many as five hundred followers on horseback."

We will join these gentry and go with them to the fortress-palace on the northern fringe of the town.

LAHORE FORT

The major group of secular Moghul buildings in Pakistan is—or, but for its sadly ruined condition, would be—that of the Old Fort near the north-western angle of the (formerly) walled town of Lahore (fig. 16). There had been a fort, presumably on this site, as early as the invasion of Moḥammad of Ghūr, in the twelfth century A.D., but of this and its medieval successors nothing is known. Excluding Sikh and later additions, the present fort was built in three main phases. The first phase dates from the time of Akbar and Jahāngīr and is marked by an inscription of the year A.D. 1617-18 set over the entrance to a small courtyard at the north-western corner of the great court of the Dīwān-i-'Āmm. The second phase represents the work of Shāhjahān, and is dated in part to A.D. 1631-32 by an inscription over the Elephant Gate (*Hāthī Pol*), the private entrance to the palace (p. XIVA). The third phase comprises the main West Gate with the adjacent walls, which fit to the fort the oblique lines of the Hazūrī Bāgh, built by Aurangzēb in A.D. 1673 as a part of the lay-out of his great Bādshāhī Masjid or Imperial Mosque (p. 92). This fine gate provided access from the fort to the mosque.

To the first phase belong the East Gate flanked by semi-octagonal panelled towers, and the walls and towers (in so far as they are ancient) on the east, the south, the eastern part of the north side, and the southern part of the west side. The south side, towards the town, has, however, been sadly mangled in modern times. The area thus enclosed constituted an oblong, some 1,200 by 1,050 feet, which was divided longitudinally by walls and buildings into two parts, the public area on the south and the more private quarters on the north. The material generally used in this phase was brickwork supplemented by the red Mathurā sandstone, and everywhere the elaborately carved bracket-construction of the Hindu tradition is in evidence. Indeed, so strong is that tradition that even animal forms are included in the design, in conflict with strict Islamic custom.

The principal feature of the southern area was a huge court or quadrangle, 730 feet by 460 feet, which was surrounded originally by ranges of vaulted chambers, now mostly destroyed. In the court, under awnings, assembled the courtiers, petitioners, visitors and other folk to whom the emperor showed himself daily from a throne-room on the first floor of a building on the northern side. The throne-room is covered by a marble pavilion and is carried forward as a balcony on sandstone brackets.

Behind the throne-room is the " Quadrangle of Jahāngir," flanked by the remains of buildings with elaborately carved porticoes of Mathurā stone. These porticoes are notable for the lacework decoration of their pillars, for the delicately honeycombed capitals of some of these, and above all, for the fantastic " carpentry " of the brackets which carry the pents or *chajjas*. The involved shapes of the brackets are as appropriate to timberwork as they are alien to masonry, and have in many cases strained even the complacent Mathurā sandstone beyond capacity. The Hindu character of the work extends to the shameless inclusion of elephants, lions and peacocks as central features of the design. Altogether, the result is bizarre and entertaining if not, perhaps, sound architecture.

In the centre of the court is a square tank with fountains surrounded by a garden. To this, Jahāngīr himself doubtless refers in the following passage of his Memoirs:

> " On Monday, the 9th of the Divine month of Āẕar, corresponding with the 5th Muharram of A.H. 1030 (November 20, A.D. 1620), mounting an elephant of the name of Indra, I went towards the city, scattering coins as I proceeded. After three watches and two *gharis* of day had passed, at the selected auspicious hour, having

entered the royal residence, I alighted happily and auspiciously at the building recently brought to completion and finished handsomely by the exertions of Ma'mūr Khān. Without exaggeration, charming residences and soul-stirring sitting-places had been erected in great beauty and delicacy, adorned and embellished with paintings by rare artists. Pleasant green gardens with all kinds of flowers and sweet-scented herbs deceived the sight.

' From head to foot how sweet, turn where I please.
Soft glances at my heart cry, Take thy ease.' "

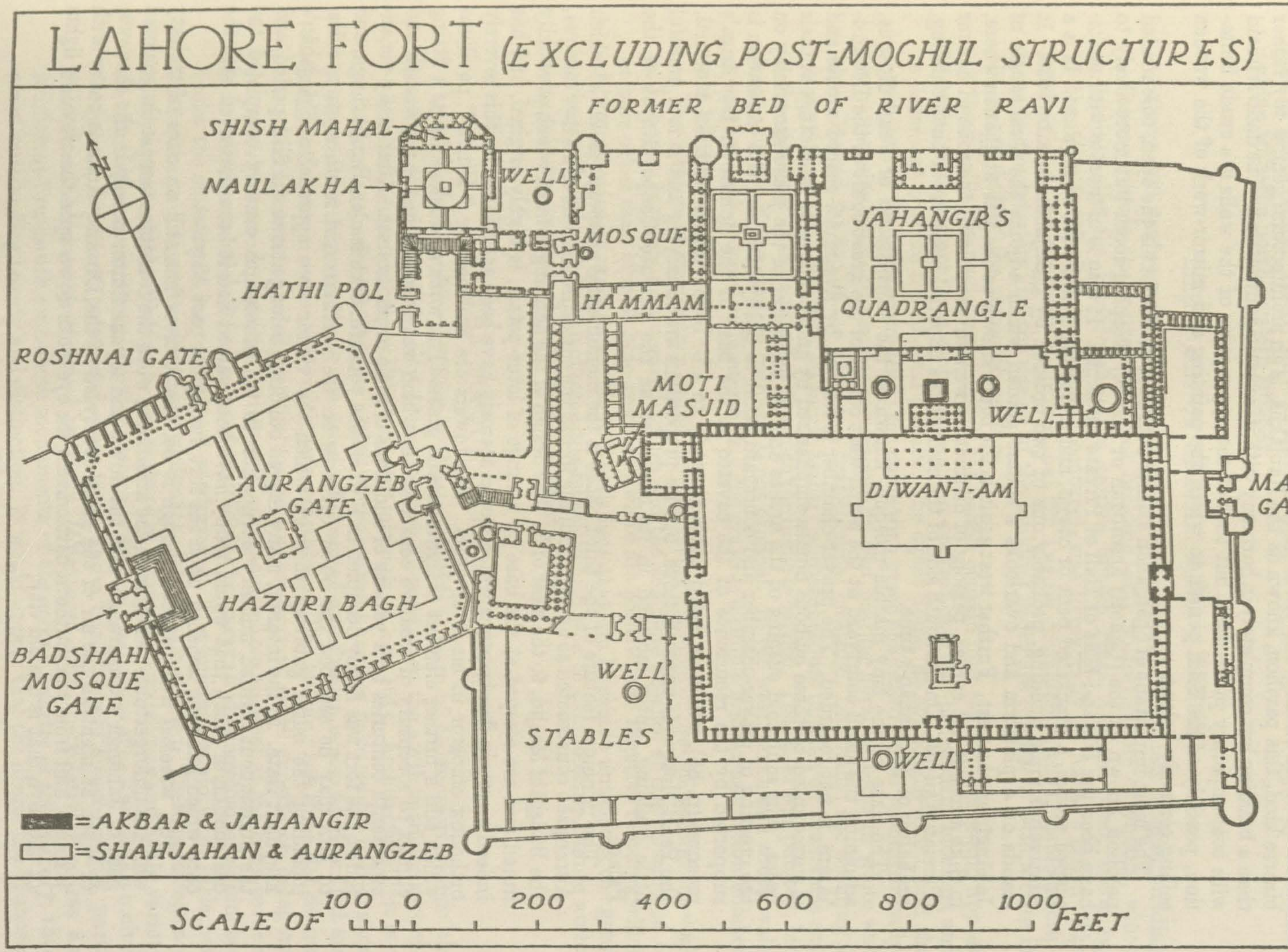
The Ma'mūr Khān (" Lord Architect ") mentioned by the emperor was the 'Abdu-l-Karīm who is also cited in the inscription over the Elephant Gate as the architect of the Shāh Burj added by Shāhjahān (see below).

To this emperor in the second of our three phases was due the erection of the 40 pillared hall or Dīwān-i-'Āmm in front of the throne-room. As it stands, the arches, roof and pavement of this hall are modern, and the pillars have been clumsily re-erected. The building projects into the great court on a platform enclosed by a sandstone railing, and the outer row of pillars was once connected by a marble railing, the two railings serving to separate the different grades of courtiers. But the principal surviving contribution of Shāhjahān was the completion of the north-western quarter of the fort, begun by Jahāngīr, with the Elephant Gate (pl. XIVA), the great semi-octagonal Royal Tower or Shāh Burj at the corner, and the adjacent building of brickwork and marble. The exterior of the fort-wall here presents a series of mosaic tile panels which are amongst the most remarkable in Asia. With the liberal-mindedness typical of the emperor and his two predecessors, Shāhjahān threw convention to the winds, and the panels depict human and animal forms in a lively entertaining fashion, with unorthodox and undisguised gusto. The subjects include court-officials, a goat-and-monkey man, a cup-bearer, footmen carrying candlesticks and flowers, richly caparisoned horses, a standard-bearer on an elephant, a dragon pursuing a goat, birds, camel-fights, elephant-fights, a game of polo, and many other subjects. The horses and camels and certain beribboned winged figures suggest a Persian origin, and there can be little doubt that the master-craftsman came from Iran; it is equally indubitable that he set up his workshop at Lahore, and that whoever he was, he was a genius.

Within the north-western corner is a square enclosure which formed a part of the domestic quarters of the palace. On the north side of the enclosure is the famous marble hall known as the Shīsh Mahal or Hall of Mirrors (pl. XIIIA). It opens on to the square through an arcade of double pillars carrying multicusped arches and inlaid with vine and flower patterns in semiprecious stones. This *pietra durà* inlay is a notable feature of the marblework of Shāhjahān; whatever its ultimate origin (and this is disputed), it is replete with Iranian elements and has nothing to do with India. Indeed the decorative details of this phase as a whole show a reaction from the liberal Hinduism of the previous phase, and constitute a refined aristocratic, exotic art as distinct from the more broadly based and robustly democratic art of Akbar's time.

Internally the hall has a marble dado, but the walls are otherwise decorated with a mosaic of glass inlaid in plaster, a form of ornamentation known anciently as "Aleppo glass," a reference presumably to the long-standing leadership of Syria in glass-production. The ceiling-decoration, which is relatively restrained, is apparently original, but the walls, which include also bits of blue and white china-inlay, are an overdone refurbishing of the early nineteenth century. This late period is also responsible for the structures which now surmount the hall.

On the west side of the square is one of the charming little marble " Bengal "


LAHORE FORT (EXCLUDING POST-MOGHUL STRUCTURES)
FORMER BED OF RIVER RAVI
SHISH MAHAL
NAULAKHA
WELL
MOSQUE
HATHI POL
HAMMAM
JAHANGIR'S QUADRANGLE
ROSHNAI GATE
MOTI MASJID
WELL
AURANGZEB GATE
DIWAN-I-AM
MASTI GATE
HAZURI BAGH
BADSHAHI MOSQUE GATE
WELL
STABLES
WELL
=AKBAR & JAHANGIR
=SHAHJAHAN & AURANGZEB
SCALE OF 100 0 200 400 600 800 1000 FEET

[Fig. 16

pavilions which, with their convex roofs derived from Bengali bamboo-construction, illustrate the cosmopolitanism of the Imperial style (pl. I, frontispiece). Of its somewhat bizarre kind, this pavilion, known as the Naulakha, is an architectural gem, a toy rather than a building but completely in harmony with its extravagant setting. The dado is inlaid with contemporary *pietra dura*, but that of the upper parts of the walls is a crude imitation, possibly of the Sikh period, to which the painting and mirror-work of the wooden ceiling certainly belong.

The most important of Shāhjahān's other additions to the fort is the open, colonnaded pavilion known as the (Chhotī) Khwābgāh or (Little) Sleeping-room but more likely to have been the Dīwān-i-Khās or Hall of Private Audience. It also is of marble with multi-cusped arches, a bracketed pent or *chajja*, and a cresting inlaid with *pietra dura*. It is a relatively simple building, probably one of two ordered by Shāhjahān in A.D. 1633. It stands on a platform and overlooks a square garden which adjoins the Quadrangle of Jahāngīr on the west. Further west again is the court known as the Khil 'at Khānan where, in Sikh times if not earlier, persons of distinction were invested with the robe of honour (Persian *Khil 'at*). On the south side of the court is the imperial *hammam* or bath building, probably of Shāhjahān's time.

The date of the tiny marble mosque, known as the Mōtī Masjid or Pearl Mosque, adjoining the small courtyard at the north-west corner of the great court of the Dīwān-i-'Āmm, is not recorded. The prayer-chamber is fronted by five multi-cusped arches and is surmounted by three bulbous domes emphasized by unusual cavetto mouldings at their bases. The multifold cusping of the arches and the character of the *pietra dura* inlay on the cresting of prayer-chamber and courtyard point to Shāhjahān; and this indication is supported by the recurrence of the cavetto at the base of the domes on Dāi Anga's mosque (p. 86), which is dated approximately to A.D. 1635. Apart from its material, the Pearl Mosque is unpretentious, but its proportions are satisfying and it is a graceful little building, aptly secluded in its character as the private Chapel Royal of the Palace.

The principal feature of the third phase is the monumental gateway (pl. XVA) which Aurangzēb constructed as an exit from the fort to the enclosure in front of his new mosque, the Bādshāhī Masjid, to the west of it. The design of the flanking towers, which are boldly fluted and are clasped at the base by a range of lotus-petals, is highly original, and has indeed a certain flamboyance which would scarcely have been sanctioned by this severely orthodox emperor in his later years. The towers are crowned by "Hindu" pavilions which add a further element of lightness and grace. The work as a whole forms a fitting climax to a century of creative construction, which was followed in the eighteenth and nineteenth centuries by a variety of additions of little or no interest. After many vicissitudes, the fort was firmly occupied in 1799 by the youthful Sikh leader, Ranjit Singh, and to him may be ascribed the outer defences on the northern and north-western sides, including the outer gateway through which the visitor now approaches Shāhjahān's Elephant Gate. In the interior, many ragged buildings belong also to the Sikh period, and the subsequent British military occupation in the nineteenth century completed the destruction of much that would today have been valued had it been preserved with the care which has been lavished upon the fort during the past 30 years.

But, wrecked and patched though it be, the fortress has still an aura of majesty which is unforgettable; whether in the afternoon, when the fountains temper the enclosed heat of Jahāngīr's Quadrangle and the doves and mynas flutter noisily in the shadows; or when at nightfall the air of the great courtyard of the Dīwān-i-'Āmm is heavy with jasmine, and from the southern battlements the eye looks down upon the crowding lights of the hive that is the old city.

From the fortress it is time to turn to certain other surviving monuments of Moghul rule in the vicinity. Later, we will travel afield, along the ancient highway that links Lahore with the north-western frontier.

THE TOMB OF SHEIKH MUSA AHANGAR

About 600 yards south-west of Lahore railway station is the oldest Moghul building in Lahore outside the fortress—a brick building, only 25 feet square externally, which is traditionally the burial-place of a certain Sheikh Musa Ahangar who, according to the *Ā'īn-i-Akbarī* (late sixteenth century), was living early in Akbar's reign. The attribution is not explicitly confirmed, but the Tughra characters of the Quranic inscriptions in the interior, and the design of the building itself, are consistent with a date in the second half of the sixteenth century.

Externally, the walls are panelled; the panels contain four-centred arches and appear to have been plastered. In each side is a four-centred doorway but modern blocking and replacement obscure the original details. The squat dome, its cylindrical drum, and the upper part of the façades are tiled; the dome with green enamelled bricks set horizontally, the remainder with square tiles set diagonally and bearing floral patterns in white and blue. Round the top of the drum is a battlemented cresting. Internally, the building is plastered and panelled, with elaborate tracery and arabesques in relief on the panels and in the spandrels of the squinches on which the dome is carried. The latter was painted, but some at least of the existing painting is not original. In the west, north and south walls are niches with decorative plasterwork. The grave is a simple brick construction finished with plaster and whitewash.

The tomb is of importance as the only surviving example of pre-Shāhjahāni tilework at Lahore. Its plain four-centred arches and the complete absence of tile-mosaic and of colours other than blue or blue-green and white are positive and negative features which alike emphasize its early date. There is little here that can be said to anticipate the great outburst of elaborately polychrome tile-mosaic which was to characterize Lahore architecture in the spacious days of the seventeenth century.

THE MOSQUE OF MARIAM ZAMĀNĪ

A 100 yards outside the East or Masti (Masjidi ?) Gate of Lahore fort stands the oldest dated mosque in the city, founded, as an inscription on the north entrance records, by Mariam Zamānī, mother of the emperor Jahāngīr, in A.D. 1614. Architecturally it is of severe and early design; the five arches of the prayer chamber have simple four-centred heads, the central arch under the usual tall framing-arch, which is also four-centred and has a half-dome ornamented with interlaced ribbing. The building has three flat domes, and at each corner of its façade are square towers carrying small cupolas on octagonal drums, whilst two equivalent turrets with cupolas rise from the roof at the back corners. Internally, the central dome has interlaced ribbing or tracery and honeycombed squinches, whilst the side-domes have interlaced pendentives. The building would be of little note but for the paintings with which the walls of the interior are covered. These paintings are, however, unrivalled in Pakistan, and perhaps in India, for their delicacy and lively variety, and for their harmonious golden tone which is due only in part to age. The panels include flowerpots, cypresses, palms and other trees, and a miscellany of flower-designs, partly framed in elaborate geometrical patterns. Compared with the relatively coarse and indifferent brushwork on Lahore monuments of the second quarter of the century, these are of outstanding beauty and distinction. It would appear that the liberal use of mosaic

tilework under Jahāngīr's successor, Shāhjahān, induced or at least coincided with a decay in the quality of wall-painting (see above, p. 73), but at the date of the present mosque the rival technique had scarcely yet appeared at Lahore.

THE TOMB OF ANĀRKALĪ

Anārkalī or "Pomegranate Blossom" was the nickname of an attractive girl who was brought up in Akbar's harem and was suspected by the emperor of carrying on an intrigue with prince Salim, afterwards the emperor Jahāngīr. The story is variously told, but it would appear that the girl was barbarously executed in the year A.D. 1599. When Salim came to the throne, he strove to make some amends for the tragedy by building a large tomb over her grave. This tomb stands in the grounds of the Punjab Secretariat to the south of the old city, and has passed through vicissitudes which have concealed all its original decoration. It is hexagonal on plan, with a domed octagonal tower at each corner, and is crowned by a central dome on a tall cylindrical drum. After 1851 it was used as a Christian church, and for this purpose the arched openings in the eight sides were wholly or partially walled in, a gallery (now removed) was constructed in the interior with an external staircase, and the whole structure was whitewashed internally and externally. The large monolithic marble gravestone had already been moved out of the building in the Sikh period, when the tomb was turned into a residence, amongst the occupants being General Ventura, the famous Italian officer of the Sikh Government. The stone was subsequently replaced by the British within the tomb, but in one of the side bays, not in its orignal central position. It has been stated that the actual grave was also moved to the present site of the gravestone, but digging in 1940 in the middle of the building revealed the former still intact five feet below the present floor, in its proper place. From accounts of the discovery, the grave would appear to be of plastered brickwork. The building is now used as the Punjab Record Office.

The gravestone bears well-cut inscriptions which include the date of the death of Anārkalī with the words "In Lahore" and the date of the construction of the tomb (A.D. 1615). It also bears the ninety-nine attributes of God, and a poignant couplet, obviously composed by Jahāngīr himself, which may be translated thus:

> "Ah, could I behold the face of my beloved once more,
> I would give thanks unto my God until the day of resurrection."

Elsewhere on the marble are the words: "The profoundly enamoured Salim, son of Akbar."

It is for these inscriptions, and for the vast size of the building which reinforces their sincerity, that the tomb is noteworthy, rather than for any special architectural quality.

THE TOMB OF JAHĀNGĪR

The emperor Jahāngīr died in camp on a return journey from Kashmir in 1627, and was buried at Shāhdara, 3 miles north-west of Lahore. The tomb (pls. XI and XII) stands beside a former bank of the Ravī in the midst of a large garden 1,500 feet square, enclosed by a brick wall with a monumental gateway in the middle of the west side. Brick-paved causeways divide the garden into 16 square flower-beds, with an ornamental tank and fountain at each intersection; and in its prime the "paradise" must have provided a beautiful and fragrant resting-place. It is recorded to have been originally the garden of Jahāngīr's celebrated queen, Nūr Jahān, and the emperor was buried there at his own request.

The tomb-building itself is also square, with sides of 325 feet, and consists of an arcaded platform with tall octagonal corner-towers and a projecting entrance-bay in the midst of each side. The external walls, including the lowest stage of the towers, are faced with Mathurā sandstone, the red colour of which is dominated by a rich panel-decoration inlaid in white and black marble (pl. XI). The panels are partly geometrical and partly of the Persian " niche " design, with representations of vases in some of the niches. The corner-towers are of five stages of which the three intermediate stages are decorated with horizontal zigzag inlay, alternately of white and yellow marble separated by black marble lines. The topmost stages are white marble " Hindu " pavilions. The stages are separated by bracketed balconies. The general design of these towers is graceful and effective. Their prototypes in the Indo-Pakistan sub-continent are best represented in Gujarāt and the Deccan, where the culminating example is the famous Chār Mīnār of Hyderabad (A.D. 1591). But there, as at Chāmpānīr and elsewhere, the pavilion of the distinctive " Hindu " type is lacking; and it is rather in the use of low octagonal corner-towers surmounted by " Hindu " pavilions at Akbar's tomb near Agra (A.D. 1612-13) that the immediate forebear of the North Indian series is to be recognized. Octagonal corner-towers, relatively taller than those of Akbar's tomb, were also attached to the charming little tomb of I'timād-ud-Daula at Agra in 1628, contemporaneously with their still bolder inclusion in the design of Jahāngīr's tomb. A few years later, in Wazīr Khān's mosque at Lahore (1634), similar towers or minarets stood detached and emphatic (p. 86), and at the same time four isolated minarets were being incorporated in the design of the Tāj Mahal. Later again, in 1673, four independent octagonal towers defined the courtyard of the great Bādshāhī mosque at Lahore. In all these, the crowning element is the Hindu pavilion, and the group may be regarded as essentially a part of the Moghul Indo-Iranian complex.

On the roof of the main platform of Jahāngīr's tomb is a central podium which probably, again on a general analogy with Akbar's tomb, carried a marble pavilion. There is evidence of a former (marble) railing round the outer edge of the podium, but the present marble flooring is a relatively modern patchwork which conceals the exact plan of the superstructure. Like so much else, the latter was doubtless removed by the Sikhs at the end of the eighteenth or beginning of the nineteenth century.

Within the main platform are ranges of ceiled or vaulted compartments with ornamented panels. In the central vaulted tomb-chamber is the marble gravestone (pl. XIIB), elaborately inlaid with *pietra dura* floral decoration and the ninety-nine attributes of God.

Although marred by the loss of its culminating feature, the tomb-building, as a whole, is a majestic structure, its severe lines counterbalancing the exuberance of the inlaid decoration upon which its interest and attraction mainly depend.

The gateway to the garden is of red sandstone, also richly inlaid with white marble and other stones, and the half-dome between the main outer arch and the passageway has honeycombed pendentives. The main angles of the structure are emphasized by pinnacles or *guldastas*.

Adjoining the tomb-garden on the west, and contemporary with it, is the so-called *Akbarī serāi*, with a three-arched mosque of sandstone, marble and plaster in the western side and similarly decorated gateways in the northern and southern sides.

THE MOSQUE AND BARĀDARĪ OF WAZĪR KHĀN

A building of outstanding distinction, not merely in Lahore but in the Indo-Pakistan sub-continent, is the mosque built in the old city in A.D. 1634 by a Punjabi minister of Shāhjahān's bearing the title of Wazīr Khān. The Wazīr was already in the emperor's ser-

vice before he came to the throne, and was at various times S͟hāhjahān's household Dīwān, his physician, and his Viceroy of the Punjab. The mosque was built around the tomb of a Persian saint and, in spite of distinctively Indo-Muslim elements, is itself predominantly Persian in character.

Reference has already been made above (p. 74) to some of its features. Its four great octagonal corner-towers, the two " Hindu " pavilions on the inner angles of the main gateway, and the bracketed oriels which flank the outer entrance, may be included amongst its Indian or Mog͟hul traits. For the rest, it is a riot of mosaic tilework of purely Persian type, set in a framework of unrelenting severity. The facade of the tomb-chamber, with its high square-framed central arch and the two flanking arches on each side of it, are a superb example of Persian floral decoration in which white and blues predominate. Elsewhere, on the towers and gateway and flanking arcades, yellow, green and other colours are equally emphatic and the variety of the pattern in detail, including a range of cypress trees round an upper stage of the towers, offers unending discovery to the eye. Here, if anywhere, may we speak of *jewelled* architecture.

The half-domes of the great arches both of prayer-chamber and of gate have interlaced ribbing and are painted with floral patterns; so also is the interior of the prayer-chamber. The central compartment of the latter has a honeycombed cornice and squinches. The main gate is unusual in Pakistan or India in that it incorporates a large domed octagonal space which forms a part of a bazaar that is doubtless as ancient in origin as the mosque. The interior of the dome is ornamented with zigzag brickwork emphasized by paint.

The whole building stands upon a platform approached by steps, at the foot of which a busy open-air bazaar commonly adds yet further colour to a scene of vivid beauty.

The building known as Wazīr K͟hān's Barādari stands behind the Central Museum, Lahore, within the site of the Wazīr's garden, commonly called the *Nakhlia* from the date-palms which it contained. The structure is square and symmetrical, with a central vaulted hall surrounded by galleries. Externally, the facades are slightly convex in elevation (clearly influenced by the convex Bengali roof—p. 82) and have a square twelve-pillared " Hindu " pavilion at each corner. Three openings with bracketed lintels occupy the centre of the upper stage on each face, and four-centred or cusped openings and niches complete the elevation. The building has long been used as the Punjab Public Library, and is completely plastered, but there is evidence that it was originally painted. Its proportions are good; otherwise in its present condition it is of little interest. It presumably dates from about A.D. 1635.

THE MOSQUE OF DĀI ANGA

The mosque (pl. XIIIB) which is known by the name of Dāi Anga, the wet-nurse of the emperor S͟hāhjahān, has emerged remarkably intact from a succession of vicissitudes, first as a Sikh powder-magazine, later as a European residence, and later again as a railway office. It stands close to the Lahore railway-station. Its date is given by Latif as A.H. 1045 (A.D. 1635), but the numerals in the tiled panel which includes them, on the left side of the left-hand (southernmost) arch, are damaged, and the reading may not be exact. It cannot, however, be very far from the mark.

The design is simple and satisfactory, of the normal Iranian three-arched type, with multi-cusped high arches above four-centred openings. At the sides are two square minarets with coved platforms which doubtless carried, or were intended to carry, " Hindu " pavilions. The three compartments of the prayer-chamber are crowned by double domes, now cemented externally, with cavetto mouldings at the junction with the drum. This feature, if, as seems probable, it is original, is unusual but may be compared with the cavettos on the Motī Masjid in Lahore fort (p. 82).

The whole facade, including the half-domes under the high arches, together with the end-walls and minarets, is (or was) ornamented with excellent mosaic tilework framed in painted brickwork, and the interior walls of the central compartment are similarly adorned—the only instance in Lahore of the use of tiles for interior decoration. The dominant colours are blue, yellow and orange. As usual at this period, the individual panels show great variety of composition and tone, and special attention may be drawn to a large panel on the southern end-wall showing a tree covered with white blossom against an orange background. Cypresses, like those on the minarets of Wazīr Khān's mosque (p. 86), occupy the angles of the central half-dome. The rigid framework of brickwork and tiled inscription, combined with the inherent boldness of the mosaic technique, holds together a composition of great diversity and intricacy in detail, and the little building occupies a high place amongst the fairly numerous contemporary examples at Lahore of mosaic *kashi* work of essentially Persian type.

THE SHALIMAR GARDEN

The great garden which has been known at least since the eighteenth century by the Sanskrit name *Shalimar* or " Home of Bliss " lies 3½ miles east-north east of Lahore on the left of the Grand Trunk Road. The date of its completion is contained in a chronogram which is recorded to have been presented to the emperor Shāhjahān by a court poet and may be translated as follows:

" When Shāhjahān the King, Defender of the Faith,
Laid out the Shalimar in becoming style,
I asked the date of the foundation from the doorkeeper of Paradise;
He answered saying, ' This is the example of the highest Paradise.' "

The words of this somewhat inconsequential reply contain the equivalents of 1047 A.H., or A.D. 1637.

The garden was laid out primarily as a place of recreation for the royal family. Today it is a shadow of its former self. Turgid water—all that is available without great cost—flows sluggishly through its channels, its fountains have ceased to play, most of the marble has been removed from its pavilions and dead whitewash substituted. But it is still the treasured resort of many thousands, and on fair-days it is alive with great holiday crowds.

It was the combined work of 'Alī Mardān Khān, a celebrated Imperial canal-engineer (p. 91), and Mullā 'Alā-ul-Mulk. It is an oblong 1,650 feet by 730 feet, and descends from south to north in three stages, each some 10 feet below the preceding. The two terminal stages constitute square gardens sub-divided by water-channels into 16 smaller squares, with small tanks at the intersections of the ducts. The middle stage, only 200 feet wide, contains the main tank, into which water flowed down a honeycombed marble chute from the garden above. The level in the tank was regulated by an outflow in the form of a waterfall lit from behind by lamps placed in decorative " pigeon holes " in the marble back and sides of the receiving cistern in the third garden beneath. The tanks and principal ducts contained fountains, and in the centre of the great tank was a marble platform or plesaunce; whilst a smaller marble platform with decorative rail awaited the emperor himself on the southern fringe of the water. A large pavilion with cusped arches overlooked the scene, and it is here that Zeb-ul-Nissa, Aurangzēb's talented daughter, is said to have written verses which may be translated as follows:

" O waterfall ! for whose sake art thou weeping ?
In whose sorrowful recollection hast thou wrinkled thy brows ?
What pain was it that impelled thee, like myself, the whole night
To strike thy head against stone and to shed tears ?"

Four smaller pavilions, formerly of red Mathurā sandstone and marble, stood beside the tank. All these buildings were largely robbed of their stonework and marble decoration by the Sikhs in the latter part of the eighteenth century, and the present plastered and whitewashed structures date mainly from that period.

Nevertheless, even in more modern times the gardens have on occasion attained something of their ancient glory, though the water-system whereby 'Alī Mardān K͟hān supplied the ducts and fountains from a source over 100 miles away, at Madhopur, has long given place to the vagaries of a local pump. It is permissible to quote Latif's description of a fête-day, written in 1892.

> " The grounds are artistically laid out with walks, flower-beds and promenades; the fountains play; the branches are tastefully formed into graceful arches over the walls. The illuminations have a most admirable effect on the luxuriant foliage of the mango and orange trees, and their bright reflections in the watery sheets below, spread like so many transparent mirrors, constitute a magic scene. The *chateau*, glittering with coloured lamps, seems like a fairy palace—the trees, the lakes, the paths, the roofs of the marble (*sic*) structures, all shimmering with variegated lights. The fireworks, diffused in most singular lights and colours, float the garden in an ocean of flame."

The garden is surrounded by a high brick wall with polygonal corner-towers surmounted by " Hindu " pavilions of red Mathurā sandstone; and there is a similar pavilion towards the middle of each side. There is a *hammam* or bath-suite near the centre of the western wall and summerhouses are placed here and there about the circuit. The present entrance from the Grand Trunk Road is a relatively modern cutting through one of these summerhouses. The original entrances were two in number, in the east and west walls of the northernmost (lowest) stage, and are of distinction as examples of mosaic tilework in a style comparable with that of the nearly contemporary mosque of Wazīr K͟hān (p. 85). The gates form semi-hexagonal projections, and are of brick with red sandstone dressings. The tiled panels with which most of the structures are covered are set in a grid of raised brickwork plastered and painted with imitation bricks. The designs are of the usual floral kinds, and the colour-scheme, including blue, white, green, yellow and brown, is characteristic of Lahore tilework of the period.

Gardens such as this, sometimes bearing the same name, are of a familiar Persian pattern. They were introduced into Pakistan and India by the Mog͟huls, the earliest of any consequence being that which surrounds Humāyūn's tomb at Delhi (A.D. 1569). Others occur at Delhi, Agra, near Srinagar (Kashmir), at Pinjor near Kalka (East Punjab), and at Wah (West Punjab). In its prime, the Lahore Shalimar must have been one of the finest of them all, although it lacks the mountain background which gives grandeur to the Kashmir setting.

THE TOMB OF ASAF K͟HĀN

Asaf K͟hān, the brother of Nūr Jahān and father of S͟hāhjahān's queen, Arjumand Bāno Begum, for whose burial the Tāj Mahal was built, was Wazīr of the emperor and a man of fabulous wealth. He died in 1641, and a costly tomb was built for him by his emperor to the west of the tomb of Jahāngīr. Like other Muslim buildings of Lahore, the structure has been drastically plundered of its decoration, but just enough remains to indicate some part of its former magnificence.

The tomb is octagonal and is surmounted by a bulbous pear-shaped double dome of masonry which was originally covered with white marble. On each side of the octagon is a

high arch with traceried half-dome above an entrance, and the interspaces between arch and entrance retain traces of elaborate mosaic and painted tilework which of its kind is unsurpassed in Pakistan. In the half-domes the mosaic tilework is panelled in conformation with the lines of the intersecting tracery, and each panel has a distinctive colour scheme—yellow, blue or dark brown—rhythmically arranged. The patterns are predominantly floral, and combine strength with a grace and gaiety that were not regarded as inappropriate to the funereal setting. In the lower jambs are remains of square painted tiles—a rare instance of this technique at a time when mosaic tilework was the dominant fashion. The gravestone, beneath a dome decorated with a floral network in plaster-relief, is of marble formerly adorned with simple *pietra dura* inlay of the type characteristic of Shāhjahān.

The building stands in the midst of a square garden with water-ducts, an entrance on the south, and central structures with some relics of similar tilework on the other sides.

THE TOMB OF NŪR JAHĀN

The tomb of Jahāngīr's famous empress, Nūr Jahān or Light of the World, lies near that of her brother, to the west of Jahāngīr's tomb. Her romantic story—her wayside birth of refugee parents, her introduction to Akbar's court, her early love for Jahāngīr as a prince, her marriage to a young Turkoman of the court, his violent death and her subsequent marriage to Jahāngīr, now emperor, her humane domination of his court and of the world of intellect and fashion, the coinage issued jointly in her name and his own by Jahāngīr—" whereby the value of gold was increased a hundredfold," as the inscription has it—all these things are matters of common history. She died in A.D. 1645, and is said to have built her own tomb.

The tomb is now a mere wreck, a brickwork shell. In plan it bears some resemblance on a small scale to that of Jahāngīr. It is square on plan with octagonal towers, roof-high, at the corners and a projecting entrance-bay in the centre of each side. Within are three ranges of ceiled or domed compartments with traces of honeycombed plaster cornices and painted floral wall-panels. The central vaulted tomb-chamber contains a marble platform designed for two graves—those of Nūr Jahān herself and of Lādlī Begum, her daughter by her Turkoman husband. Of the present simple uninscribed marble gravestones, one is ancient and the other a modern copy. On the roof is a modernized podium which may originally have carried a pavilion, although no evidence of this is now visible. Beneath the tomb, approached as usual from the south by a sloping passage, is the actual burial-vault, where the two coffins hung suspended until the violation of the place by the Sikhs. To these violaters, who in the late eighteenth and early nineteenth century wrecked the Muslim monuments of Lahore with the same thoroughness wherewith the Muslims had themselves wrecked the monuments of Hinduism several centuries earlier, may be ascribed the removal of the marble and sandstone veneer of which traces can be seen on the exterior of the building. With the removal of its surface decoration, the whole glory of the structure has departed.

THE CHAUBURJI

Amongst the many tiled buildings of Lahore, the gateway known as the Chauburji, on the west side of the Multān road some two miles south of the fort, occupies an average place. It derives its name from the four octagonal towers which stood at its corners. A tile inscription above the arch proclaims that

"This garden, in the pattern of the garden of Paradise,
has been founded [missing line] . . .
The garden has been bestowed on Miān Bāi
By the bounty of Zebinda Begum, the lady of the age."

Another inscription incorporates a date equivalent to A.D. 1646.

The identity of Zebinda is uncertain. She is popularly supposed to have been Zeb-un-Nisa, the learned daughter of the emperor Aurangzēb, but if so, she was a young child at the time of the construction of the gate. The story goes that the garden was laid out under the supervision of the princess's favourite female attendant, Miān Bāi; that it thus became known as "Miān Bāi's Garden," and was on that account given to Miān Bāi by her royal mistress. Be that as it may, the garden has long disappeared, and the legend is as good as any other.

The corner-towers, of which one has fallen with the north-west quarter of the main structure, are generally similar to those of Wazīr Khān's mosque, but may be criticized as excessively slender for their height. They end at the top in coved platforms which doubtless carried "Hindu" pavilions whereof no trace remains. The whole building is covered externally with mosaic tile panels of the usual floral type, in a wide range of colours amongst which blue predominates. Without any special distinction it nevertheless enriches the surviving record of Lahore *kashi* work.

NAWĀN KŌT

Likewise associated with the name of Zebinda Begum is a tiled gateway and two corners of the enclosure-wall of a vanished garden in the village of Nawān Kōt on the east side of the Multān road, a mile south of the Chauburji. The gateway is a four-square structure with a "Hindu" pavilion on each angle, and with the front and sides covered with mosaic tiled floral panels in which green, yellow and orange predominate. The back is painted. A noteworthy feature of the pavilions is that they have fluted domes, covered with green tiles, and that, like those of Dāi Anga's tomb, they are supported by four pillars on each side. The upper stage on each side of the passageway has terracotta *jalis* or screens with network and zigzag patterns. The building is not dated but may be ascribed to the middle or third quarter of the seventeenth century.

The surviving (north-east and south-east) corners of the enclosure have low octagonal towers crowned by pavilions, painted below the eaves and tiled above them, with gold fluted domes.

Behind the gateway is the stripped core of a brick tomb of which the dome is pyramidal externally. A part of the original mosaic marble floor remains, but the gravestone has gone and its identity is unknown. Like the garden, it is popularly attributed to Zebinda Begum.

The village retains considerable traces of its defensive brick walls and round-fronted towers, built in A.D. 1820.

THE GULĀBĪ BĀGH GATEWAY

On the left side of the Grand Trunk Road, between Lahore and the Shalimar Garden, stands the gateway of the now vanished Gulābī Bāgh or Rose Garden. It was built in A.D. 1655 by a Persian nobleman Mīrza Sultān Beg, Admiral of the Fleet and cousin of the husband of Sultān Begum, daughter of Shāhjahān. He was fond of sport, and was killed on a shooting expedition through the bursting of an English firearm given to him by the emperor.

The gateway is a simple four-square building with the usual high half-domed central arch flanked on each side by a painted niche in the lower stage and a railed opening with multi-cusped head in the upper stage. The angles are marked by slender octagonal minaret-like pilasters. The notable feature of the structure is its mosaic tile decoration, which is well preserved on the outer face and is a good sample of the achievement of the Lahore tileworkers of the middle of the seventeenth century. Apart from the spandrels, which contain the usual floral tendrils, the design consists of floral or inscriptional panels with raised brick frames plastered and painted with false brickwork. Yellow is a dominant colour, as it was liable to be at this period, but green, brown, blues and white combine to produce a rich and varied effect which is strengthened by the mosaic technique.

The name Gulābī Bāgh is actually the chronogram of the building. Amongst the tile-inscriptions is one which may be translated as follows:

"What a pleasant garden, a garden so beautiful that the poppy is marked with the black spot (*i.e.* the spot of envy),
The flowers of the sun and moon are fitted to adorn it as lamps.
Ghazi asked of wisdom the chronogram of the garden,
The date given was 'Gulābī Bāgh,' Rose Garden."

THE TOMB OF 'ALĪ MARDĀN KHĀN

'Alī Mardān Khān, formerly one of the *Omera* of the court of Shāh Tahmāsp of Persia, surrendered Kandahār to Shāhjahān in 1637 and joined the Moghul court at Lahore, where he was made a grandee of the first class. Later, he became Viceroy of the Punjab, but he is best remembered for his engineering works, of which the supply of water to the Lahore Shalimar Gardens (p. 87) and the canal which bears his name at Delhi are outstanding. He died in 1657 and was buried in his mother's mausoleum at Lahore.

The tomb-building lies to the right of the Grand Trunk Road on the way from the city to the Shalimar Garden, and is seen from afar by reason of its height. It is of brick, and stands on a podium which bears traces of a former veneer of red Mathurā sandstone inlaid with white and black marble and with a basal moulding of Attock stone. It is octagonal on plan, with a high half-domed arch and an entrance in each side. A tall cylindrical drum carrries a somewhat flattened dome and overweights the design of the building in spite of the "support" given by octagonal plastered and painted pavilions placed on all the angles of the main structure. The double dome was originally covered with gray stone bearing a floral pattern in white marble inlay and the drum was white-plastered and painted, but of these features only slight traces remain. The octagon was formerly veneered with stone and marble panelling, and a fragment of a cornice-moulding of white marble with zigzag black inlay has survived the ravages of the Sikh period. The half-domes have (or had) interlaced tracery of plaster with painted floral patterns. The inner surface of the dome over the tomb-chamber was decorated with floral network in plaster-relief, similar to that of Aṣaf Khān's tomb (p. 89) or of the central chamber of the Bādshāhī mosque (p. 93). The two gravestones have been removed. Beneath their site is the sub-vault, approached from the south, in which the actual burials took place.

Though it is scarcely fair to judge a building which has been so drastically robbed of its ornamentation, its proportions cannot be described as happy; no amount of vesture could disguise the fact that it is at the same time overgrown and underfed.

The tomb stood in an enclosure of which only the northern gate remains. Unlike the tomb, the gate retains much of its ornamentation, and this, though not of exceptional quality, is a fine example of mosaic tilework of the mid-seventeenth century. The predominant tone is yellow, but light and dark blue, white, green, dark ochre and brown

combine to form a rich medley of colours in the form of floral panels and foliate tendrils. The character of the work is similar to that on the gateways of the Shalimar Garden and the Gulābī Bāgh, and incidentally, as on those gates, the panels are framed in raised bands of imitation brickwork painted on the plastered surface of the structural bricks. The tilework is supplemented by painting in the traceried half-dome of the main arch and elsewhere. The architectural design is generally similar to that of the gate of the Gulābī Bāgh, and as a whole the building, like its fellow, derives an added importance from the destruction of so much that might have rivalled it.

THE TOMB OF DĀI ANGA

Behind the gateway of the Gulābī Bāgh, on the site of the former garden, stands the tomb of Dāi Anga, Shāhjahān's wet-nurse, and of his daughter Sultān Begum. The tomb is of brick and stands upon a podium covering the actual burial-vault. It is square on plan, with a flattened central dome and a pavilion at each corner. The dome was tiled in a white and dark blue zigzag pattern, and the tall cylindrical drum is decorated with floral patterns in mosaic tiles in which green and yellow predominate. The domes of the pavilions were also tiled but, for the rest, these are plastered and painted. The cresting of the main building is also tiled, with a tiled string-course below which the walls are panelled (the panels having multi-cusped heads within a rectilinear framework) and plastered, and were formerly painted. The interior of the dome is plastered, with painted interlaced ribbing or tracery, and is carried on honeycombed squinches. The gravestones have disappeared. An inscription in the tomb-chamber gives a date equivalent to A.D. 1671.

THE BĀDSHĀHĪ MOSQUE

The great Bādshāhī or Imperial mosque, to the west of Lahore fort, was built in A.D. 1673-74 under the supervision of Aurangzēb's foster-brother and Master of Ordnance, Fidāi Khān Koka, and is the most important building of Aurangzēb's reign (pl. XVB). The rigid orthodoxy of this emperor combined with a certain secular exhaustion to deprive the latter part of the seventeenth century of any great distinction in the realm of architecture. More than one critic of that period has observed a lack of vitality, of the eager invention which enlivened the work of Akbar or the studied refinement of the age of Shāhjahān. It must be confessed that there is about the Bādshāhī mosque an air of academic complacency and fulfilment that robs it of the interest of some earlier and indeed less perfect designs. But, with all this sense of aridity, the satisfying proportions of the prayer-chamber and the magnificence of the towering, swelling domes cannot be denied. If scarcely a work of genius, it is at least a monument of dignity and propriety.

The mosque and its courtyard (530 feet square) are raised upon a platform which is approached from the east by a handsome flight of steps and an upstanding gateway of traditional Moghul type. This gateway, of red Mathurā stone, has at each of its four corners a small square minaret with lotus-petals at the base, and a row of tiny pavilions, of the kind beloved by Shāhjahān, breaks the otherwise rigid skyline. Painted floral panels, mostly of eighteenth and nineteenth century date, variegate the archway, the external niches, and the walls and roof of the passageway. As a whole, the structure is, however, a second-rate work in a familiar convention.

At the four corners of the courtyard are the tall octagonal towers to which reference has already been made (p. 85), and four smaller minarets, also octagonal, are attached to the corners of the prayer-chamber. The latter has the usual high central arch, somewhat weakly cusped and with spidery floral inlay in the spandrels, flanked on each side by five

smaller arches, and above, as a strengthening element in the design, rise three grand, bulbous marble domes, with bold basal constructions which, nevertheless, fall short of the exaggerated and grotesque forms of the following century. The red sandstone of the building is tricked out externally with unobtrusive lines and patterns in white marble inlay. Within, the main dome of the prayer-chamber is ornamented by a floral network in plaster-relief, and the walls and roof generally are painted, though little of the actual colouring is as old as the structure.

The mosque was badly damaged by an earthquake in 1840, and the tops of the towers, paving and other details are modern.

Between the courtyard and the fort is the contemporary Ḥaẓūrī Bāgh or walled garden which links the mosque with the fort through Aurangzēb's gate (p. 82) and contains the remnant of a marble two-storey pavilion built by Ranjit Singh about 1818 with materials taken from Moghul structures. The upper storey of this pavilion was thrown down by an earthquake in 1932, but in spite of its improvised and fragmentary character the building is not without grace and charm.

KŌS MINĀRS

From the time of Aśoka onwards, the arterial roads of India were a constant care of the major administrations. The *Sarak-i-A'zam* or Grand Trunk Road, perhaps the most famous highway in the world unless we include the trans-Asiatic silk-routes in the category, received a proportionate share of attention. It connected the middle Ganges plain, the region of the great cities, with the north-west frontier, and was the backbone alike of the Mauryan, Gupta and Moghul empires. It was a main channel of international and inter-regional trade. A part of it was repeatedly traversed by the Grand Moghul and his court on their periodical progresses to Kashmir.

In 1619 the emperor Jahāngīr ordered a small minaret-like monument to be built at every *kōs* along this road from Agra to Lahore. The *kōs* was an ancient Indian measure of distance, which varied from time to time; it was derived from *krośa*, meaning a " cry," and was probably a synonym of the *goruta* (the " moo of a cow ") used as an indication of distance as early as the *Kautilīya Arthaśāstra* (*c.* 300 B.C.). It was probably known also to Hiuen Tsang in the seventh century A.D. In Jahāngīr's day the conventional *kos*, as measured between surviving *kōs-minārs*, varied from 2 miles 3 furlongs to 2 miles 5 furlongs. Upwards of 168 of these *minārs* are known to exist, but it is not necessary to suppose that all without exception date from Jahāngīr. For example, a series of them along the road from Agra to Faṭhpur Sīkrī is more likely than not to have been erected during the short effective life of the latter city between A.D. 1570 and 1582.

Of four *kōs minārs* which remain in the environs of Lahore, the typical example at Shāhū-kī-Gaṛhi, near the railway-line just outside Lahore station, is here illustrated (pl. XIVB). It is of brick, about 27 feet high, with an octagonal base and cone-shaped superstructure. Like the remainder of the series, it is uninscribed.

SERĀI AT ATTOCK

The grand Trunk Road, like most trade-routes in Asia, was marked by the presence of *serāis* or enclosures in which travellers might find shelter at the end of the day's march, sometimes at 12-mile intervals. These *serāis* were of mud-brick, baked brick or stone, and consisted of a court surrounded by cells and verandahs and often reinforced by corner-towers.

Remnants of a number of them have survived in West Pakistan. A typical example, built partly of brick and partly of stone, is the so-called Begum-kī-serāi on the left bank of the Indus at the Attock crossing. Its court is 331 feet square and contains a small three-arched mosque with low domes. Round the sides of the court are the usual compartments, and polygonal stone towers project from the four corners. The date of the building is unknown but may well be that of the recorded improvements of the amenities of the Grand Trunk Road by Jahāngīr in the first quarter of the seventeenth century.

BĀOLIS

In addition to the provision of *kōs minārs* or distance-marks and *serāis* or shelters, the Moghuls improved the water-supply along the line of these arterial roads. The ideal arrangement, rarely achieved, was to have a roadside well every three miles, and in some cases the structure was an elaborate *bāoli* with flights of steps and occasionally cool underground shelters in which the traveller could refresh himself. The *bāoli* near Losar, on the Grand Trunk Road about 5 miles north-west of Taxila, is a good example of the series. It is of brick, about 100 feet deep, and is approached by a staircase with landings at intervals under four-centred arches carrying battlemented crestings. It is entered through an arched and domed gateway flanked by small chambers, with staircases to the roof; and behind the entrance at ground-level, on each side, is an oblong brick platform upon which travellers could rest. On one side also is a trough for watering animals. The structure is probably of early seventeenth century date.

As another example may be cited a *bāoli* within the ruins of the fort built by Akbar at Gujrāt (West Punjab) in A.D. 1580. It has a simple brick staircase descending to a large well under four-centred arches, with platforms or landings at intervals, and is doubtless contemporary with the fort.

ATTOCK FORT

Lastly, at suitable strategic points there were forts for the control of traffic and invasion. One of these, at Rohtās, and another at Gujrāt have already been mentioned. Yet another, still in occasional military use, guards the all-important crossing of the Indus at Attock.

" In the month of Rabi-'us-Sāni of the year 989 A.H. (A.D. 1581) the emperor ordered to be built on the banks of the Indus . . . a fortress which he called Atak Banāras, to distinguish it from Katak Banāras " (in Orissa). So writes Badā'onī. At the same time Akbar established a ferry here and imported a colony of boatmen from Hindustan, the descendants of whom still live at Mallāhitolā and enjoy the revenue of a village in Chhachh which was granted by the emperor for their support. His primary motive in building the fortress was to use it as a base against his brother Mīrzā Mohammad Hakīm, Governor of Kābul, who had invaded the Punjab; but it remained in service as one of the principal forts whereby the Moghul empire was held together in its prime. Akbar again went to Attock early in A.D. 1585 and spent the greater part of the year there; and he returned thither in 1588. At Attock he had a mint for copper coins, and *dāms* struck there from his thirty-seventh to his forty-third year (A.D. 1591-97) and a specimen of his forty-eighth year are known. After Akbar, Attock is represented in the Moghul coin-series only by a solitary piece, a rupee of Muhammad Shāh (A.D. 1745), but it subsequently became a mint-town of the Durrānī dynasty. In 1812 Ranjit Singh seized the fort from the Wazīr of Kābul, and it remained in possession of the Sikhs until its occupation by the

British in 1849. The first Moghul, Bābur, never mentions Attock, though he frequently speaks of Nilāb, a few miles lower down the Indus; and it was presumably, therefore, during Akbar's reign that the place became the main river-crossing.

The fort stands picturesquely on the left bank of the Indus by the side of the Grand Trunk Road (Sarak-i-A'zam). It was completed in two years under the supervision of Shams-ud-dīn Khawāfī, later Dīwān of the Punjab, and the inscription on a slab of marble, now set above the inner north gateway, dated 991 A.H. (A.D. 1583) thus gives the date of the completion.

Unlike the palace-fortresses of Fathpur Sīkrī and Lahore the Attock fort appears to have been a purely military post designed to hold the river-crossing and guard the bridge of boats which from ancient times until A.D. 1883, when the modern steel bridge was opened, adjoined the site of the fort.

> The fortifications are over a mile in circumference and are strengthened with upwards of eighteen bastions, all circular except one, which is rectangular. They are built mostly of a local shaly rock set in thick lime mortar, but for arches, vaulting, domes, and external string-course small *lakhuri* brick is used, and for the original gateways a sandstone resembling that found at Taraki in the Jhelum district.
>
> An interesting feature of the fortification is a narrow gallery contrived high up in the walls to give the defenders head and back cover. The greater part of the gallery has a vaulted roof, but in one stretch thick flat roofing-slabs replace the brick vaulting. The battlements, loopholes and machicoulis bear evidence of changes to meet new needs arising from changing armament.
>
> Midway up the wall of a tower on the north and overlooking an extensive stretch of the river is a balcony approached through a four-centred doorway in the front of the tower, and sheltered by a pent or *chajja* above. This is the only building in the fortifications which is designed for residential purposes and, with alterations, is still used as such.
>
> None of the original gateways is now in use, but three are traceable, respectively near the modern Lahori, Kābulī and Water gates. A further modern gateway, known as the Mallāhitolā Gate, has been opened in the west wall, and another, known as the Delhi Gate, pierces the long modern wall of the British period running north to south from the Lahori Gate and dividing the fort into an upper and a lower area.
>
> The present main entrance, the Mori Gate, facing the Grand Trunk Road on the north-east, probably dates from the Sikh period, but its hornwork and ramp are British.
>
> The Kābuli Gate on the west is the only old entrance now open to view. It is double and flanked by round towers; the outer gate is in line with the fortification wall, and is backed by a square court from which the inner gate opens into the interior. The gates are of sandstone, with four-centred openings under musketry-slits. The inner gate also has three windows with balconies, and is panelled.
>
> In the centre of the north wall is a rectangular projection known as the Magazine. Originally this must have been the principal entrance to the fort, and the modern magazine occupies the courtyard between the inner and outer gateways. The latter is no longer traceable. The top of the inner gateway is still visible and is surmounted by an inscription of the year 991 A.H. In general design it resembles the Kābuli Gate but has on either side a small oriel window with *chajjas* and decorated cresting.
>
> There are no old buildings in the interior except some underground chambers in the upper part near the modern Delhi Gate. At present these are inaccessible, but traces of water-channels and reservoirs have been observed in one of them and they appear to have been cool chambers for use in summer. In the lower fort area the small road from the Clyde Battery to the modern Lahori Gate at many places cuts through old walls and ruined vaulted chambers built in small bricks.

PART II. EAST PAKISTAN

17. PRE-MUSLIM

EAST Pakistan (East Bengal and the western fringe of Assam) falls geographically into three main divisions: the Chittagong hill-area on the east, the Bārind plateau in the north, and the great alluvial plain seamed with the multiple streams of the Brahmaputra-Ganges (Padma) delta in the south. Bārind represents the Sanskrit *Varendra*, which was a sub-division of Pundravardhana-bhukti, a comprehensive name embracing almost the whole of North Bengal. The deltaic region bore the name of Bang, whence the modern Bengal.

Bang, or more correctly *Vaṅga*, is really the name of a people who inhabited this region from a remote past. They were racially and culturally different from the proud Āryans, who refer to them with disdain in their religious literature, beginning with the *Aitareya Āraṇyaka* (*c.* seventh century B.C.). But by the time (*c.* fourth century B.C.) of the Hindu epics, the Rāmāyana and the Mahābhārata, they had gained some political recognition and are mentioned in a list of peoples that entered into political relations with the high-born aristocrats of Ayodhyā in mid-India. There is no doubt that they were an enterprising people who had taken to foreign trade, and possibly the market-town on the bank of a river—both bearing the name " Ganges "—mentioned in the Greek *Periplus of the Erythrean Sea* (*c.* A.D. 60-110) was the focus of their efforts. According to the *Periplus*, " through this place are brought malabathrum and Gangetic spikenard and pearls and muslins of the finest sorts which are called Gangetic." This city of " Ganges " is also mentioned by Ptolemy, who describes it as a metropolis and distinguishes it from another port town, Tamalates, *i.e.* Tāmralipti in West Bengal; while in a Buddhist work, *Milinda-pañho*, Vanga is included in a list of maritime countries where ships congregated for purposes of trade. In a later Sanskrit inscription we have a reference to Vaṅga in connection with the Buddhist missionary of " the masters and fraternities of monks " of Ceylon; while in another the lower sub-division of Vaṅga is significantly called Nāvya, which means " accessible by boat or ship," a fitting designation for the south-eastern part of the Gangetic delta, which is a labyrinth of rivers and creeks.

The name Pundravardhana-bhukti preserves the memory of the ancient inhabitants of the plateau, namely the Pundras. Of these little is known, but, like the *dasyus* of the Punjab, they were regarded with contempt by the Āryans and are described as a wild tribe in the Āryan *Aitareya Brāhmana*, which may be as old as the earlier part of the first millennium B.C. The Pundra capital, Pundranagar, is represented by the extensive ruins of Mahāsthān in the Bogra District, where, appropriately enough, has been found the oldest datable relic of East Pakistan. This is a fragmentary limestone slab discovered by chance in 1931, and bearing six lines of a Brāhmī inscription (pl. XVIIA). Both alphabet and language resemble those of Aśoka's pillar-edicts (mid third century B.C.), and may indicate that this part of Bengal lay within the Mauryan empire. The inscription records the earliest known Bengal famine and the measures taken by the *mahāmātra* of Pundranagar to meet it by the issue of paddy from reserve stocks evidently kept for the purpose. These stocks were to be replenished in better times both in kind and in coin—an interesting early reference to coinage, presumably of the punch-marked type found frequently in Bengal as in other parts of India. Not merely as a curiosity, but

as a side-light upon the economy of the period, the document is of outstanding historical interest.

At present we have no knowledge of the shape and appearance of Pundranagar in Mauryan or pre-Mauryan times. On more than one occasion, excavations have been carried out at Mahāsthān, but have nowhere reached the earlier levels. Nor does any other site in Bengal help us at present to fill the gap. Indeed, for 1,000 years after Aśoka our archaeological record is largely a blank in East Pakistan. And the historical record for this long period is only a little less shadowy. There are hints of the use of Vaṅga or Bang and the Ganges by trade from China and South India in the first century A.D. Occasional terracotta figurines from Mahāsthān have been thought to show " Śunga " characteristics, and may be of the first and second century B.C. These scraps of evidence do not carry us far. A little more substantial is the fact, recorded in an inscription added in the fourth century A.D. to the Aśokan pillar now at Āllahabād fort, that at the time " frontier " kings ruling in East Bengal were in some sort of relationship with the great Gupta dynasty which now controlled the Gangetic plain from the old capital of the Mauryas. And shortly afterwards Eastern Bengal itself was absorbed into the Gupta empire.

Towards the close of the sixth century, the Gupta empire in turn disintegrated, and was succeeded by a chaotic struggle for power amongst a succession of petty rulers. In the words of a contemporary inscription, there supervened " the rule of the bigger fish swallowing the smaller ones." The same inscription informs us that this " rule " was brought to a close by the " election " of Gopāla to the overlordship of this region. This Gopāla was destined to lay the foundations of the great Pāla empire about the middle of the eighth century.

The Pālas, whose homeland was *Varendra* (Bārind) in North Bengal, welded together an integral Bengali kingdom which, under the emperor Dharmapāla (about A.D. 770-810), included the whole of Bengal and Bihar and vied for political supremacy over mid-India. This new authority extended also to cultural matters, though here the Pāla influence was reflected rather eastwards, in Burma and Java. Dharmapāla ranks amongst the great kings, and seems incidentally to have been distinguished as much for his modesty as for his success. At least such is the tenor of a court-poem preserved for us on a copper-plate: " Hearing his praises sung by the cowherds on the borders, by the foresters in the forests, by the villagers on the outskirts of villages, by the playing groups of children in every courtyard, in every market by the guardians of the weights, and in pleasure-houses by the parrots in the cages, he always bashfully turns aside and bows down his face." In the ninth and tenth centuries, however, his virtues were forgotten and his empire progressively dissolved. Much of Bihar was lost; and south-eastern Bengal fell under the domination of another dynasty, that of the Chandras, who in the eleventh century were supplanted by the Varmans. After further vicissitudes, the dwindled kingdom of the Pālas passed to the foreign Brahman Sena dynasty, which hailed from western India, and it was from that dynasty that, within less than a century, the realm was seized by the Muslim invaders (see p. 103).

Both the Pālas and the Chandras were Buddhists, and under them the masses of the countryside embraced a Buddhism of a complex polytheistic kind which would doubtless have astonished the Master himself. The adventurous Chinese pilgrim, Hiuen Tsang, who came here about A.D. 635, speaks of 20 Buddhist monasteries in Pundravardhana or North Bengal, and 30 more in Samatata or South-east Bengal. Architecturally the expression of this Buddhism was on no uncertain scale. It will suffice to mention the vast monastery of Paharpur to be described hereafter; that of Vikrampur, in Dacca district, which was probably the birth-

place of the monk Atisha Dipankon, a missionary to Tibet; the Jagaddata *vihāra*, in Dinajpur district, which in the eleventh century was spoken of as " the peak of the monasteries "; and the Pandita *vihāra*, in the Chittagong district where, beyond the reach of Muslim conquest, Buddhism lingered on after its extinction further west.

Meanwhile the Varmans and Senas had made strenuous attempts to reassert the dominance of Brahmanism and the caste-rules of the Hindu *dharma*. One of the Senas is even said to have invited Brahmans from Kanauj to establish in Bengal a new and pure breed of that caste to replace the local Brahmanism which had itself become infected with Buddhism. The descendants of these newcomers are today known as *Kulina* (pure) Brahmans; and it is probably a tribute to their early prowess that the kings, as recorded by inscriptions, " built temples as high as the mountain peak and excavated tanks as deep as the sea." It may be doubted, however, whether their efforts fundamentally altered the popular faith. That faith, indeed, whether Buddhist or Brahmanical, was at this time being coloured increasingly by the so-called Tantricism, a mystery-cult of a non-Āryan kind imbued with ideas and ritual related to fecundity and closely associated with the worship of village-goddesses. Some of these goddesses were incorporated alike in Buddhism and Hinduism; but the underlying antagonism of the Hindus to the Buddhists may have tended eventually to prepossess the latter in favour of the other antagonist of the Hindus, namely Islam, and thus to pave the way for the newer faith.

PAHARPUR

Buddhism in East Bengal would appear to go back to Aśoka, if we may believe the tradition handed down by Hiuen Tsang that certain stūpas there had been founded by that emperor. One of these was in the vicinity of Pundranagar, and nearby was a magnificent Buddhist establishment, with spacious halls, tall-storeyed chambers, and more than 700 monks. The immense scale of some of the Buddhist monasteries under the wealthy patronage of the Pāla kings, however, is best represented by the Somapura *vihāra* established by Dharmapāla about A.D. 800, near an old axial road which connected Pundranagar with ancient Kotirarsha, a district-headquarters (now in the Indian portion of Dinajpur district). The monastery is known today from the adjacent village of Paharpur (Rājshāhi district); and this in turn derives its name from the *pahār* or hill to which time had long ago reduced the central shrine. Here, amidst the copses and tall sugar-canes and frequent fields of jute, grain and roots which in their season variegate the otherwise unbroken level of the Bengal plain, are the excavated remains of the largest known monastery south of the Himālayas (pls. XVIIIA and XIX). For those to whom footage and figures are significant, it may be recorded that the monastery is no less than 920 feet square externally, with some 177 cells, each about 13 feet long, opening on to a great court through verandahs. But only by travelling laboriously to the remote Jamalganj railway-station and walking thence three miles westward along village-tracks and field-paths to the site, and thereafter by climbing to the top of the brickwork pyramid still 70 feet high, which represents the uncovered ruin of the shrine, and from that eminence surveying the marshalled battalions of cells, the tangled ancillary buildings, and the crowd of votive stūpas—only so is it possible to visualize fully the ostentatious piety of this strange last phase of Indian Buddhism.

The monastery was entered through a monumental northern gateway, with pillared forehall which may be an addition to the plan; and this structure was balanced in the middle of each of the other three sides by buildings which appear to have been subsidiary shrines

approached from within by steps. Amongst other buildings, the most notable are a long, aisled hall, probably the refectory, near the south-eastern corner and an external lavatory approached by a raised gallery or bridge from the southern enclosure-wall across an archway in which the bricks are set on edge radially, more or less voussoir-fashion—one of the rare but by no means negligible instances of radial as distinct from corbelled arch-construction in pre-Islamic India (see above, p. 58). In the outer wall of the lavatory a series of seventeen chutes, representing at least two periods of construction, discharged waste on to a sloping brick paving, now re-buried, at the foot of the wall.

In the midst of the courtyard rises the great temple or stūpa, a structure of remarkable design and splendour (pls. XVIIIA, XIX). It is roughly pyramidal in elevation and cruciform in plan, the latter elaborated by salient angles and the former by receding stages, which combine to produce a great diversity of light and shade. The surviving stages are three in number with a circumambulatory passage following the intricacies of the plan at the base of each, the second passage being 16 feet above the lowest (at ground level) and 7 feet below the uppermost. The top of the lowest stage was approached by a grand staircase from the north. From the first to the second stage the arrangement is less certain, but it is possible that pairs of small staircases flanked a projecting cellular brick structure which extends each arm of the cruciform plan. These cells have no entrances, and were presumably filled solid with earth, in accordance with a widespread architectural practice (p. 102), to carry a shrine at the second-stage level, *i.e.* at the level of the third or uppermost ambulatory. At the latter level, the main arms of the cross contain large four-pillared shrines, backed by cells which may originally have been purely constructional but, if so, were later opened out for use. The third stage is the great square brick shaft which, deep down, contains a brick floor and was presumably intended for relics, though none was found. The nature of the structure formerly carried by the tall uppermost stage is conjectural. The great stūpa or temple at Nālandā in Bihar was crowned by a small shrine, but the absence of any possible provision for a final staircase at Paharpur suggests rather a terminal stūpa, as on the famous ninth or tenth century Ānanda temple at Pagan, Burma, where, as also in Java, influence from East Bengal is recognizable. The Ānanda temple shares with Paharpur the high terraced podium.

There is evidence that at some period the temple underwent extensive restoration. Many of the terracotta panels, to which further reference will be made, were reset sideways, the presumption being that they had fallen out and were replaced in accordance with their shape rather than their subject-matter. The shrines in the main arms of the cross at second-stage level seem to have undergone alterations, which, on superficial evidence, are difficult to diagnose with certainty. And decorated pedestals were inserted into many of the cells, thus converting them into shrines, presumably at a time when the number of monks was on the decline. These and other changes may with probability be ascribed to Mahipāla (about A.D. 988-1038), who momentarily repaired the Pāla fortunes after more than a century of decline and, amongst other things, is known to have restored buildings. It is fair to infer, however, from the obvious re-use of earlier panels already noticed, that none of the Paharpur sculptures, to which we must now turn, is later in date than the original construction of the building (about A.D. 800).

The walls of both the lower Paharpur stages are enlivened by sculptured panels which form the special feature of the building. The panels fall into two main series: those of stone, which are set at irregular intervals in the lowest stage, just above the old ground-level; and those of terracotta, of which there are two courses or friezes higher in the same wall, and two in the equivalent wall retaining the second stage. Sixty-three of the former panels and 2,000 of the

latter remain *in situ*, and many fragments of both categories were found amongst the debris. The stone reliefs are of varying character and quality, and probably represent very fairly the general range of local sculpture in the seventh and eighth centuries A.D. They include only one undoubted Buddhist image, a Bodhisattva, which has suffered badly from later iconoclasm but was originally held in special esteem and was fronted by a small tank or *kunda*. For the rest, they represent a number of Brahmanical or even secular figures and groups, with a special emphasis on the Kṛishṇa legend. They have been divided by critics into three groups: a small series of panels in a delicate hieratic style recalling the academic tradition of the Late Gupta period; a larger number of relatively crude sculptures in a heavy but lively style essentially akin to that of folk-art; and a series which may be described as a cross between the two. Whether these stylistic differences represent a variety of contemporary schools, or whether, in part at least, they are due to the re-use of earlier sculptures alongside work contemporary with the building, is a moot point, but the latter alternative is the more probable. It seems likely that a nucleus of derived Late Gupta reliefs was re-set in the present structure and was liberally supplemented by local village artists who sometimes tried to simulate the traditional hieratic manner.

The first of these groups of stone carvings exhibits the somewhat vapid elegance of the evolved Gupta classicism. Details of ornament are rendered with minute precision, and human forms have a conventional grace, with attenuated limbs and clinging, lifeless drapery. Subjects include the traditional lovers, who may in this case be Krishna and Rādhā (pl. XIXA), Yumuna standing on the tortoise, and Balarāma with snake-hood and plough. By itself, this first group would give no special distinction to the monument, but the second group is of greater individuality.

This second group (pl. XIXB) is the stone counterpart of the very abundant terracotta plaques which will be considered presently. It consists of high reliefs representing a variety of scenes and figures in an uncouth but vigorous style, which is often heavy and lacking in knowledge but is, nevertheless, expressive in a naïve, direct fashion. It displays no spiritual or intellectual quality; the features are roughly differentiated lumps and gashes, and the drapery is indicated in summary simplicity. But it is, at the best, a vivid and convincing snapshot of the life of the village and of the gods and monsters which peopled the village-mind. Its expressiveness is in proportion to its lack of academic learning or metaphysical content. To the modern eye, in particular, it is refreshing after the hot-house atmosphere of Gupta convention. Its subjects are often taken from the life of Kṛishṇa, whose amorous and other adventures were so dear to the Bengali heart. Others are borrowed from the epics, which held then, as today, a high place in the affections of the countryside. And it includes dancers and other figures familiar to the social and religious life of the village.

The third group, as a compromise between the hieratic and the folk art, is less satisfactory. The joyous boorishness of the latter becomes self-conscious and awkward, lacking alike the stilted charm of the one style and the vivacity of the other. Fortunately this group is in a small minority—not much more than a dozen examples in all.

But it is in the extensive series of terracotta panels that the outstanding importance of the structure lies (pl. XVIIIA). These form the main body of the second of the three groups above considered. Their subject-matter includes the Buddha, Śiva, Ganeśa, Brahma, Vishnu, Garuda, animal-fables, dancers, acrobats, warriors, mendicants, ploughmen, musicians, women and children, symbols, animals, birds, trees and other objects, sacred or profane, in bewildering profusion and confusion. They are set in the building without coherent sequence and the examina-

tion of them has (and was doubtless intended to have) the excitement of a voyage of discovery. They are crude, vigorous, light-hearted, unreflective works, deep-rooted in the folk-art of the Bengal countryside and owing little or nothing to academic tradition. Their features recur in reliefs from Mainămatī-Lālmāi (Comilla), Mahāsthān, Sabhar in Dacca district, and at the Dah Parbatiya temple near Tezpur in Assam, all dating approximately from the eighth and ninth centuries A.D., and constituting an unusually attractive and distinctive school of popular art at a period in which Buddhism is inextricably mingled with Brahmanical and vernacular elements.

PATTIKERĀ

The discovery of the Mainămatī-Lālmāi panels just referred to deserves more than passing mention. Upwards of 4 miles to the west and south-west of Comilla in the Tippera district, a low but prominent range of sandstone hills extends from north to south for a distance of some 10 miles and, during the long monsoons, stands like an island amidst the sodden plain. The northern part of the ridge is named from the village of Mainămatī, the southern in known as the Lālmāi range from its light red colour and may be the Rohitāgiri or Red Hill which was the capital of the Chandra kings. The discovery of a copper-plate inscription at Mainămatī recording a grant of land to a Buddhist monastery built in the city of Pattikerā in the year A.D. 1220, together with the retention of the name Patikarā or Patikerā for an adjacent *pargana*, had indicated that the Pattikerā town and state, referred to in certain Burmese chronicles relating to the eleventh and twelfth centuries A.D., were situated hereabouts.

The actual site was in fact found, though not recognized, as long ago as 1875, when, as the *East Bengal District Gazetteers* record, the " ruins of a small fort were discovered buried in the dense jungle," on the highest point of the Mainămatī range during the building of the road. " The fort was of brick, rectangular in shape and about 200 yards square, and not far from it were found some handsomely cut Hindu statues of aboriginal type, the pig being introduced in the bas-relief and the snake also figuring in the groups." The so-called fort was doubtless a monastery, and the sculptures part of the decoration of its shrine. But it was left to the accident of war to discover unmistakably the veritable remains of the ancient Pattikerā. In 1943-44 the headquarters of the British Fourteenth Army were at Comilla, and military buildings were erected at various points on the Mainămatī-Lālmāi ridge. The contractor, on digging into the ridge, discovered an unexpected and apparently unlimited supply of bricks, which he proceeded to dig out systematically and re-use in the new structures. Amongst the bricks were sculptured plaques and other objects which eventually attracted attention and were partially salved. Much damage had then been done, but there is still ample scope for less summary exploration.

So far as can be determined at present, the principal structures extended sporadically along the ridge from end to end, with a concentration towards the north. Eighteen main sites or groups of sites have so far been detected and mapped of which the following may be noted. Mound No. 5, a large mound 2 miles south of the Dacca-Chittagong trunk road, was so thoroughly ransacked for bricks that the main elements of the building-plan can be reconstructed from the contractor's spoil-trenches. The ruins have been nicknamed " Ānandarāja's Palace," but they represent a monastery, with sides a furlong in length, enclosing a central building of multangular form, the whole resembling the stūpa and monastery at Paharpur (above). As at the latter site, the walls of the central building had been enlivened with bands of terracotta panels in the vivid Pāla folk-style, representing the Buddha and a wide range of

semi-divine, monstrous and secular subjects, including warriors, acrobats, musicians, sages, animals and plants (pl. XVIIIB). There were also many bricks bearing geometrical patterns. It is evident that, at least in richness of decoration, though not perhaps in quality, the shrine or stūpa must have rivalled the archetype at Paharpur.

South of this mound is Mound No. 6, known as "Rūphan-Kanyā's Palace." Here again the traces of a central structure and enclosing walls can be made out, and a further series of terracotta plaques was recovered from the debris.

A short distance further south are the ruins of the so-called "Bhojarājā's Palace" (Mound No. 7). Fragments of massive brick walling represent a central building, possibly square on plan and profusely decorated with terracotta plaques and ornamental bricks. The plaques are comparable with those from Mound No. 5.

Half a mile to the south-south-west is Mound No. 10, known locally as "Rūphan-murā," a complex covering an area about 400 yards square, which has been extensively despoiled. At one point a cruciform brick structure with re-entrant angles and recessed corners, richly decorated with plaques and mouldings, can be detected. It is said that the contractor's man found here seven pots containing tiny votive images of the Buddha in bronze. Thirteen of these images were subsequently recovered; they are not more than 2 inches in height, and represent the Buddha in the earth-touching attitude. The creed-formula is embossed on the under side. They resemble inscribed votive bronzes from Jhewari in the Chittagong district, which are assignable to the ninth to eleventh centuries A.D.

The chronology of these various groups of sculpture is necessarily hypothetical in the absence of scientific excavation, but their general character indicates the eighth to eleventh centuries A.D. They add notably to the importance of the East Bengal school which they represent.

MAHĀSTHĀN

For Hindu buildings of these centuries, we may return to Mahāsthān, the ancient Pundranagar. This was apparently, as we have seen (p. 96), a provincial capital as early as the Mauryan period, in and about the third century B.C. Here also, as excavation has shown, was a city of the Guptas (fourth to seventh century A.D.); and here in and after the eighth century ruled the famous Pālas, children of the local soil. Even when its days as an administrative centre were over, it remained a place of regular pilgrimage to the *dargah* or burial-place of a Muslim warrior-saint, Shāh Sultān Māhisawār, which crowns the highest mound above a buried temple of Siva. Within the *dargah* is a small mosque built in A.D. 1718.

It was possibly the Pālas who built the brick defensive walls, 11 feet thick, which frame an oblong plateau, the *garh* or fort, some 5,000 feet long and 4,000 feet broad and rising today to a height of 15 feet above the bank of the river Karateya which flanks it on the east. Towards the north, west and south, for a radius of 4 miles, other mounds indicate outlying buildings and suburbs. Close outside the fortified area, a large Vishnu temple has been partially exposed on the Govinda Bhītā mound and has been ascribed to the late Gupta period, with subsequent rebuildings. It has yielded decorated bricks and sculptured terracotta panels of the characteristic Bengali type already referred to. But the notable feature of Mahāsthān is the liberal use of *cellular construction, i.e.* the employment of rectangular compartments packed solidly with earth as the base or nucleus of a tall, massive podium crowned either by a shrine or, perhaps as at Paharpur, by a stūpa. Cellular construction is not indeed confined to Bengal; it occurs, for example, far to the west in two tall temples at Ahichchhatrā in the Bareilly district of U.P.;

but it was found specially suitable by the Bengali builders as an economical means of raising their sacred buildings to a commanding height above the flood-level of their monsoon-ridden landscape, and was widely employed by them during the five centuries preceding the Islamic conquest.

A notable example of this type of structure lies about a mile to the south of the walled town on a mound known as Gokul Medh, in the village of Gokul. Here excavation has revealed a roughly cruciform substructure at least 28 feet high and of elaborate multiple cell-construction (pl. XVIIB). On the substructure is an octagonal base or plinth, which may have carried a stūpa but no part of the original superstructure remains. The latter had been replaced during the Sena period (eleventh to twelfth century A.D.) by a square shrine and porch placed at a slight angle on plan. The approach had been from the west, but the doorways of the shrine and porch had been blocked and the floor-level raised to an unknown height. Clearance within the shrine revealed a small intrusive cell containing a human skeleton—possibly the cell of an anchorite—and, under it, a shallow circular brick-paved pit, 12 feet 8 inches in diameter, which partly underlay the shrine and presumably belonged to it. In the centre of the pit was laid a stone slab, 1 foot 8 inches by 1½ feet, bearing twelve shallow holes and, in the middle, a larger hole which contained a tiny gold leaf, less than an inch square, bearing the figure of a recumbent bull in repoussé and indicating that the overlying shrine was a Śiva temple. Nothing was found underneath the slab.

Terracottas ascribed to the Gupta period were found during the work but no satisfactory chronology was established. It is evident that the whole structure originally constituted an imposing terraced pile with a central shrine of complex outline, possibly Buddhist, and with shrines at the four main corners of the podium, the whole thus forming an elaborate plan of *pañcharatna* or five-fold type. The plan of the main seventh-century shrine at Nālandā (Bihar) is partially comparable.

Other examples of the same construction are certainly present elsewhere in the vicinity and will some day repay careful exploration. The time will come when a monograph on the early medieval architecture of East Pakistan will add a new and individual chapter to the story of Asiatic building-design and engineering.

18. THE MUSLIM PERIOD IN EAST PAKISTAN: THE URBAN SETTING

ON a morning of the year 1199, the aged rāja Lakshmana Sena, Brahmanical ruler of Bengal, was seated at dinner in his camp at Nūdīa, when a sudden clamour arose in the environs of his headquarters. Shortly afterwards, members of his court burst into the room and, with a hurried word, hustled him through a back door to a boat on the adjacent river. The little party continued its tumultuous flight by water and land towards Vikrampur (p. 104), in what is now the Dacca district, and, as it passed out of view, flames were already rising from the hutments behind it.

Thus began the long period of Muslim domination in Bengal. The author of the disturbance had been the redoubtable Ikhtiār-ud-dīn Moḥammad bin Bakhtiar of Khalj, freebooting general of Qutb-ud-dīn Aibak, Turkoman viceroy and later sultan of Delhi. He had ridden ahead of his troops with only eighteen men and, mistaken for a horse-dealer, had penetrated

to the rāja's headquarters without opposition. After the destruction of the camp, he proceeded to install himself at the Hindu capital, Lakshmanāvatī or Gaūr, and was confirmed in his conquests by Qutb-ud-dīn nominally as a dependent of Delhi. Thereafter, the establishment of Islam in what is now East Pakistan proceeded apace, helped doubtless by the inadequacy of the decadent Buddhism and contentious Brahmanism of the region to offer any serious spiritual opposition.

The most notable material relics of this new colony of Islam are the mosques and tombs which, being built of brick and stone, have long outlasted the more fragile secular buildings that at one time surrounded them. But, as a preface to brief descriptions of selected monuments of this kind, we may glance for a moment at their vanished urban background. Reference has already been made in the preceding chapter to certain of the pre-Muslim cities of East Bengal: to Pundranağar or Mahāsthān, which may go back to the time of Aśoka and beyond; to Pattikerā, headquarters of a Buddhist principality on the eastern fringe of the province; to Nūdīa, the town or semi-permanent camp where Mohammad bin Bakhtiar rudely interrupted the rule of the Sena kings; and to Vikrampur to which the evicted Lakshmana withdrew. Others might easily be added. Here it will suffice to add a further word about twelfth century Vikrampur, which is represented today by a large amorphous area some 12 miles south-east of Dacca at the confluence of the river Dhaleswari and a branch of the Brahmaputra (map, fig. 17). Brickbats and sherds litter the fields, but the only coherent relic of this period is the Ballāl-bari, the name of which associates it traditionally with Ballāl or Vallāla (about A.D. 1159-70), one of the more famous of the Sena rulers. The visible remains of the Ballāl-bari are a slightly raised plateau about 750 feet square surrounded by a ditch about 200 feet broad, with an entrance-causeway in the middle of the east side. Cunningham, writing in 1879, mentions an annexe on this side, now obscured by irrigation-canals. Brick débris can be seen at various points in the enclosure, but no intelligible structure is exposed. It is likely enough that the site is that of the fortified nucleus of the widespread Brahmanical capital. A later medieval mosque in the vicinity is described on p. 115.

When we reach the Muslim period, in and after the thirteenth century A.D., cities of more or less metropolitan status crowd upon us. The twin capitals of Gaūr and Pānduā, little more than 5 miles apart on opposite sides of the Mahānandā river, are just outside the western boundary of East Pakistan, save for a tiny fragment of the southern end of Gaūr. They are marked today by immense earth-covered ramparts, wide ditches, fragmentary but still imposing brick gateways, and a famous series of mosques, tombs and tanks. A hundred-and-seventy miles to the south-east, the three great cities of Vikrampur, Sonārgāon and Dacca lay within a dozen miles of one another amidst the fluctuating river-system of the Ganges-Brahmaputra delta. The recurrent rise and fall of these successive or sometimes contemporary capitals is not always easy to explain. Gaūr, for example, as Lakshmanāvatī or Lakhnaūtī, was the principal Sena capital at the time of the Muslim invasion, and remained the chief seat of Delhi rule in Bengal until 1338, whereafter an independent Islamic administration established itself in the already-existing town of Panduā, now to be known as Firūzābād. A century later, Gaūr once more became the capital, but in 1565 the government was transferred to Tānda, away to the south-west. In 1575-6, Akbar's first viceroy re-transferred the administration to Gaūr, but an epidemic resulted in its hasty return to Tānda, whence it was shortly afterwards removed across the Ganges to Rājmahal. Then, in 1612, it was established for a few decades at Dacca, which now, for the first time, under the name of Jahāngīrnagar, emerged as a major city. About the middle of the century, prince Shāh Shuja' as viceroy of Bengal returned to

Rājmahal, but his successor Mīr Jumla (A.D. 1659-63) restored the administration to Dacca where it remained until its final removal to Murshidābād in 1704.

Into this chronicle of mutability, the ancient city of Sonārgāon, 11 miles east-south-east of Dacca (map, fig. 17), intrudes from time to time in somewhat nebulous fashion. The name and a few relics proclaim its Hindu origin, and in the time of Balban, sultān of Delhi (A.D. 1266-87), the district was ruled by a Hindu chief. In A.D. 1337-38, Fakhr-yd-dīn Mubīrak Shāh, a former armourbearer, declared himself an independent ruler, with his seat of government at Sonārgāon. But soon afterwards he was overpowered by Shams-ud-dīn Ilyās Shāh, the real founder of the independent Muslim kingdom of Bengal, in which Sonārgāon received the reduced status of a subsidiary capital, though coins continued to be minted here. As a provincial capital, it was generally ruled by one of the sons or brothers of the reigning king. Sometimes the provincial governor asserted a virtual independence, as did Ghiyāthuddīn 'Azam Shāh (A.D. 1389-1409) and, much later, the celebrated 'Isā Khān, who was ruling here about 1586. The traditional tomb of A'zam Shāh can still be seen at the site (p. 112).

Like many of these cities, Sonārgāon may best be visualized as a series of more or less detached groups of buildings covering in the aggregate a large area bordered by river or swamp. The site as seen today is a triangular expanse some 4 miles from east to west and perhaps 2 miles from north to south, set between a stream of the Brahmaputra and the Meghna rivers and interspersed with fields and jungle. Somewhere, as at Vikrampur and Mahāsthān, there was doubtless a fortified nucleus; possibly at the modern village of Mograpara where, half a century ago, could be seen an " eminence " (now cleared away) " which still bears the name of *Damdamah* or fort." Nearby are the ruins of secular buildings of panelled and plastered brickwork of the seventeenth century and a small three-arched mosque rebuilt in A.D. 1700, but incorporating a fifteenth-century mihrāb and inscription, the latter, now extracted and lying loose, bearing the name of Jalālud-dīn Fatḥ Shāh and the equivalent of A.D. 1484. For the rest we must suppose that the lesser houses and shops resembled those of a Bengali village at the present time. Mr. Ralph Fitch, " Merchant of London," who visited Sonārgāon in A.D. 1586, records that " there is best and finest cloth made of cotton that is in all India. The chief king of all these countries is called Isacan, and he is chief of all the other kings, and he is a great friend to all Christians. The houses here, as they lie in most part of India, are very little, and covered with straw, and have a few mats round about the walls and the door, to keep out the tigers and foxes; many of the people are very rich. Here they will eat no flesh, nor kill no beast; they live on rice, milk, and fruits. They go with a little cloth before them, and all the rest of their body is naked. Great store of cotton cloth goeth from thence, and much rice, wherewith they serve all India, Ceylon, Pegu, Malacca, Sumatra, and many other places." And nearly a century later in A.D. 1666, Tavernier noted the same sort of thing at the Moghul provincial capital itself: " Dacca is a large city, extending along the banks of the river; the inhabitants wishing to have their houses close to the Ganges. . . . These houses are, in fact, nothing but miserable huts, built of bamboo, grass and mud. Those within the more central part of Dacca are equally ill built; and as for the residence of the governor, it is enclosed by high walls, in the midst of which there is a place constructed entirely of wood. It is usual to reside in tents, pitched in a large court within this enclosure."

Cities thus lightly built were easily moved, at the sacrifice of the more durable mosques and forts which piety and servitude could readily replace. And, as we have seen, moved they were, like chessmen, in the combined political and economic game of the times. Occasionally, as in the recorded instance at Gaūr, epidemic disease lent a hand. Sometimes we may suspect

a measure of caprice in the individual rulers such as recurs in the restless civic history of Delhi. More often, the caprice was doubtless of nature rather than of man. The fickle river-system of Bengal, swollen by the double monsoon, changes its shape from year to year, and so changes the economy of the countryside which it serves or deserts or drowns. And there was yet another contributory factor—the need for the suppression of river-piracy on the frontier. Rājmahal, says the eye-witness Tavernier, " had long been the residence of the governors of Bengal. . . . But the river having altered its course . . . as well as for the purpose of checking the depredations of the king of Arracan and some Portuguese banditti, who infested the mouth of the Ganges and molested the inhabitants of Dacca, the governor and the merchants who resided at Rājmahal quitted that place and removed to Dacca, which is at present a city of great trade.

" The last time I visited Dacca, the nawab Shāista Khān, who was then governor of Bengal, was at war with the king of Arracan, whose naval force usually consisted of two hundred gallies, besides smaller vessels. These gallies navigate all parts of the gulf of Bengal, and enter the river Ganges, the tide flowing higher up than Dacca.

" Shāista Khān, uncle to Aurangzēb, the reigning emperor, and the most intelligent man in the empire, found the means of detaching several chiefs from the army of the king of Arracan, and at the same time forty gallies commanded by Portuguese joined him. In order the more strongly to bind these new auxiliaries to his service, he gave a large monthly payment to each of the Portuguese officers and soldiers, proportioned to their several ranks. . . .

" It is a most surprising thing to see with what celerity these gallies are rowed: there are some so long that they have fifty oars on each side. . . . Many of them are highly ornamented with azure and gold."

Thus with the help of mercenary fleets operating under the immediate eye of the viceroy, seventeenth-century Dacca marshalled the extensive river-traffic of the great delta on the further limit of the Moghul dominion. Jahāngīr's fortified base at Dacca itself has completely disappeared, but other riverine forts, such as those at Munshiganj (Idrākpūr), Sonākāndā and Ḥājiganj (p. 126), survive as evidence of the efforts of successive governors to safeguard the eastern commerce of the empire. How far their efforts succeeded is less certain. Even today no small craft will put out from the shores of some of these rivers after dark, for fear of the river-dacoits who maintain, seemingly with adequate reward, a traditional occupation of the locality.

Finally, for a general picture of life in Bengal under the Muslim rulers, we cannot do better than quote a chapter from a Chinese account written early in the fifteenth century by one Mahaun, who was sent to various kingdoms of the western ocean by the Chinese emperor Yung-lo.

> " The kingdom of Pang-ko-la (Bengala) is reached by ship from the kingdom of Su-men-ta-la (the Samara of Marco Polo, the kingdom of Samalenga in Sumatra, near Acheen) as follows: a course is shaped for the Maoshan (an island off Acheen Head, most probably Pulo Bras or Nasi) and Tsui-lan Islands (the Nicobars); these being reached the vessel then has to steer north-west and, being favoured with a fair wind for twenty-one days, arrives first at Cheh-ti-gan (Chittagong), where she anchors. Small boats are then used to ascend the river, up which, at a distance of 500 li (a li is about a third of a mile; 500 li is approximately 166 miles) or more, one arrives at a place called Sŏna-urh-kong (Sunargaon), where one lands; travelling from which place in a south-westerly direction for thirty-five stages, the kingdom of Bengala is reached. It is a kingdom with walled cities, and (in the capital) the king and officials of all ranks have their residences. It is an extensive country; its products are abundant, and its people numerous; they are Moham-

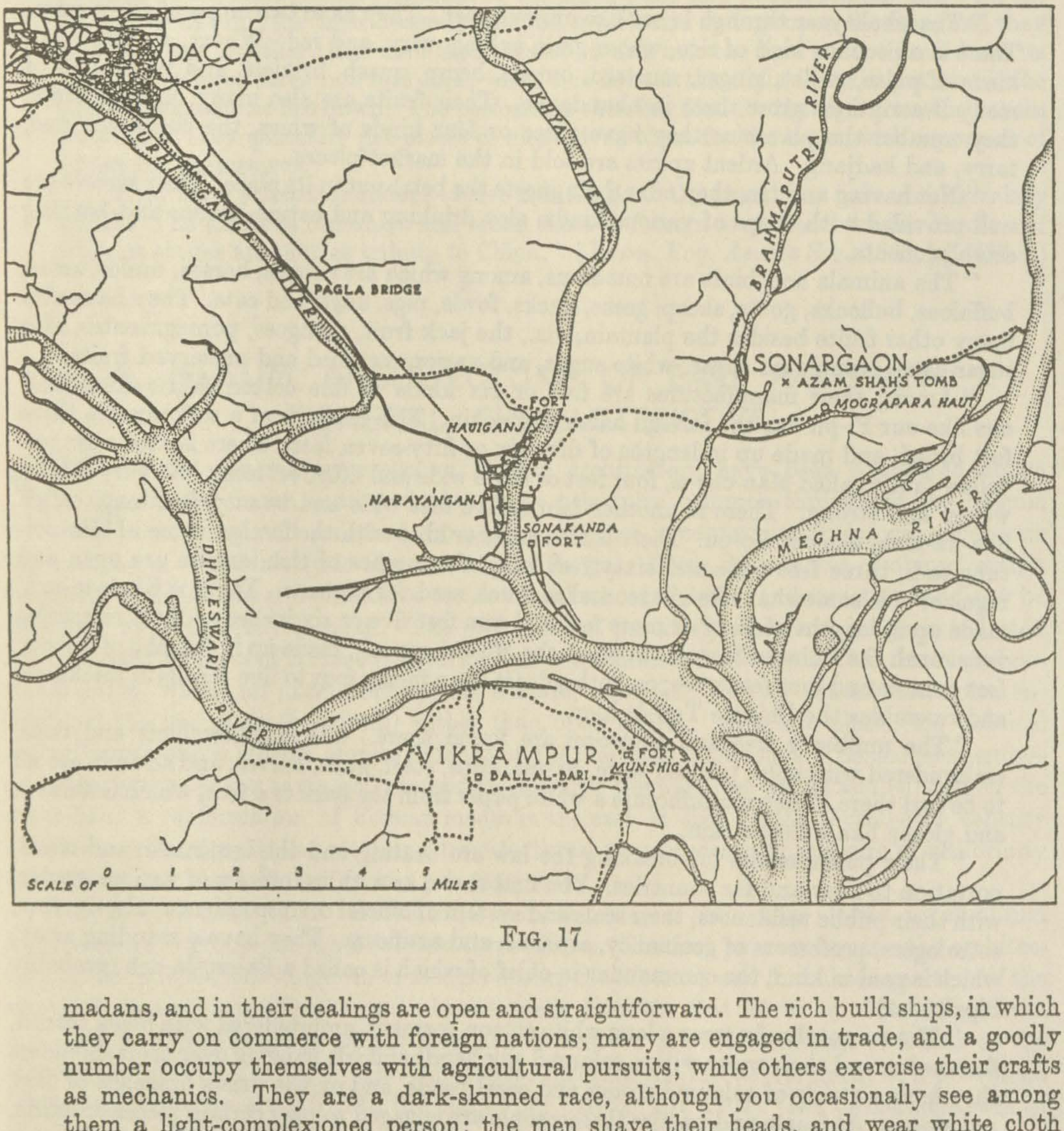


FIG. 17

madans, and in their dealings are open and straightforward. The rich build ships, in which they carry on commerce with foreign nations; many are engaged in trade, and a goodly number occupy themselves with agricultural pursuits; while others exercise their crafts as mechanics. They are a dark-skinned race, although you occasionally see among them a light-complexioned person; the men shave their heads, and wear white cloth turbans and a long loose robe with a round collar, which they put on over their heads, and which is fastened in at the waist by a broad coloured handkerchief; they wear pointed leather shoes. The king and his officers all dress like Mohammadans; their head-dress and clothes are becomingly arranged. The language of the people is Bengali; Persian is also spoken there.

"The currency of the country is a silver coin called Tang-ka which is two Chinese mace in weight, is one inch and two-tenths in diameter, and is engraved on either side; all large business transactions are carried on with this coin, but for small purchases they use a sea-shell called by foreigners Kao-li.

"The ceremonies observed by them on their coming of age, their funerals, sacrifices, and marriages are like those of the Mohammadans.

"The whole year through is hot like our summer. They have two crops of rice a year. There is a peculiar kind of rice, whose grain is long, wiry, and red. Wheat, sesamum, all kinds of pulse, millet, ginger, mustard, onions, hemp, quash, brinjals, and vegetables of many descriptions grow there in abundance. Their fruits are also many, among which they number the plantain; they have three or four kinds of wines, the cocoanut, rice, tarry, and kadjang. Ardent spirits are sold in the market-places.

"Not having any tea, they offer their guests the betel-nut in its place. Their streets are well provided with shops of various kinds, also drinking and eating-houses and bathing establishments.

"The animals and birds are numerous, among which are camels, horses, mules, asses, buffaloes, bullocks, goats, sheep, geese, ducks, fowls, pigs, dogs, and cats. They have also many other fruits besides the plantain, viz., the jack fruit, mangoes, pomegranates, also sugar-cane, granulated sugar, white sugar, and various candied and preserved fruits.

"Among their manufactures are five or six kinds of fine cotton fabric (muslins); one like our Pi-pu has the foreign name of Pi-chin. This fabric is of a soft texture three feet broad, and made up in lengths of fifty-six or fifty-seven feet. There is also a ginger-yellow fabric called Man-che-ti, four feet or more wide and fifty feet long; it is very closely woven and strong. There is another fabric, five feet wide and twenty feet long, called Sha-na-kieh, like our Lo-pu. There is also another kind with the foreign name of Hin-pei-tung-ta-li, three feet wide and sixty feet long; the meshes of this texture are open and regular; it is somewhat like gauze, and is much used for turbans. There is Shah-ta-urh, made up in lengths of forty or more feet and two feet five or six inches wide; it resembles very much the Chinese San-so. There is the Mo-hei-mo-leh, made up in lengths of twenty feet or more and four feet wide; on both sides it has a facing four to five tenths in thickness, and resembles the Chinese Tow-lo-kien.

"The mulberry tree and silkworm are found there. Silk handkerchiefs and caps, embroidered with gold, painted ware, basins, cups, steel, guns, knives, and scissors are all to be had there. They manufacture a white paper from the bark of a tree, which is smooth and glossy like a deer's skin.

"Their punishments for breaking the law are beating and the bastinado, and transportation to near and far countries. You find there, as with us, officers of various grades, with their public residences, their seals and system of official correspondence; also doctors, astrologers, professors of geomancy, artisans, and artificers. They have a standing army, which is paid in kind, the commander-in-chief of which is called a Pa-szu-la-urh (probably Sipahsalar).

"The mountebanks wear a long white cotton garment, embroidered with black thread, fastened round their waist with a coloured silk handkerchief; hanging over their shoulders they have a string of coloured stones and coral beads, and on the wrists bracelets of dark red stones. At feasts and parties these people are engaged to play certain pieces of music, and to sing their native songs, and to go through various dances together.

"There is another class of men called Kan-siao-su-lu-nai, that is to say, musicians. These men every morning, at about four o'clock, go to the houses of the high officials and the rich; one man plays a kind of trumpet, another beats a small drum, another a large one; when they commence, their time is slow, and it gradually increases to the end, when the music suddenly stops. In this way they pass on from house to house; at meal-times they again go to all the houses, when they receive presents of food or money.

"There are many conjurers, but their performances are nothing very extraordinary. The following feat, however, is worthy of mention. A man and his wife parade the streets with a tiger, secured by an iron chain; on arriving opposite a house they give the following performance: The tiger is unloosed and sits on the ground; the man, quite naked and with

a switch in his hand, dances in front of the tiger, pulls him about, knocks him with his fist and kicks him; the tiger becomes enraged, growls and springs upon the man, and they both roll over together. The man then thrusts his arm into the tiger's mouth and down its throat; the tiger dares not bite him; when this is over the chain is again put round the tiger's neck, and he lies down. The performers then beg food for the tiger from the houses round, and they generally get pieces of meat given them for the beast, with a present of money for themselves.

"They have a fixed calendar; twelve months go to the year; they have no intercalary month. The king fits out ships and sends them to foreign countries to trade. Pearls and precious stones are sent as tribute to China." (*Journ. Roy. Asiatic Soc.*, 1895, pp. 523-9.)

19. MUSLIM ARCHITECTURE OF EAST PAKISTAN: GENERAL CHARACTERISTICS

SOME of the general principles of Muslim architecture have been considered above (p. 63). It has beeen indicated that those principles, common throughout the Islamic world, are varied and enriched from place to place in conformity with local conditions and traditions. Particularly is this the case in Bengal. There, remoteness combined with a masterful environment and climate to create a local school of design and structure that may be described as specifically Bengali. The proximity of peculiarly luxuriant jungle is reflected in a luxuriant richness of surface-decoration and in a fondness for forms derived from bamboo-construction, whilst an exceptionally wet climate, nourished by two annual monsoons, encouraged the use of roofs (domes) rather than open courts. In a late phase, the political centralization of the Moghul empire induced on the one hand a diffusion of Bengali elements—particularly the convex eaves and roof-ridge—towards the west (see pp. 82 and 86) and on the other hand a reaffirmation of Persian modes in the east, so that by the seventeenth century Muslim architecture, whilst retaining local features, presented a new measure of uniformity throughout the northern half of the sub-continent.

If we now examine these various traits and tendencies a little more closely, we shall find it convenient to group our material into three phases. The first phase comprises the architecture of the independent kingdom of Bengal during the fifteenth and first three-quarters of the sixteenth century A.D. The second phase extends from the first intrusion of the Moghuls in A.D. 1575 to the completion of the Moghul conquest by the establishment of Dacca as the viceregal capital in A.D. 1612. The third phase includes the full development of a provincial Moghul culture from A.D. 1612 to the end of our period (A.D. 1707). Let us consider each of these phases briefly in turn.

Phase I (prior to A.D. 1575). The Islamic architecture of pre-Moghul Bengal was based primarily upon that of Delhi, which nominally administered the province until A.D. 1338. What may be described as Delhi features include (*a*) the liberal use of small domes, a practice widely extended in Bengal owing to climatic conditions; (*b*) the occasional use of massive circular, domed corner-towers—compare, for example, the corner-towers of the Shatgumbad mosque at Bagerhāt (p. 114) with those of the Khirkī and Kalān masjids at Delhi, built soon after A.D. 1370; (*c*) the free use of small two-centred arches often stilted; (*d*) the spiked cusping of some of the arches, of which there are several thirteenth-century examples at Delhi, culminating in the 'Alāī Darwāza (A.D. 1305); and (*e*) the fashion for markedly cusped or engrailed

arches with abundant floreate decoration within a richly decorated rectangular framework, as in the marble mihrāb of the Arhāī-dīn-kā-Jhompṛā mosque at Ajmer (A.D. 1200). This last feature, in particular, though derived from the Seljuk architecture of Iran, fitted the native genius of the Bengal craftsmen for terracotta carving, a craft which, as we have seen, had been developed in the service of the local Buddhism and Brahmanism long before the arrival of Islam.

To these borrowed elements, the Bengali builders proceeded to add other traits or preferences of their own. They lacked, as a rule, the sense for co-ordinated design that distinguished the Delhi architects. The long lines of undistinguished entrances to their mosques offer no focus to the eye, such as was given by the central bay or enlarged central entrance favoured by Delhi. It may be that the Bengal monsoons discouraged the larger entrance, although later Moghul architects were not so deterred. As a partial substitute for the high central arch, the Bengali architects gave a certain differential symmetry to their façades by the quaint device of transferring to their cornices the convex profile of the eaves or ridge of a bamboo hut. The Bengal eye evidently demanded this convexity, as the Greek eye demanded the more subtle convexity or *entasis* of column-profiles. A further derivation from bamboo-construction may be recognized in the free use of small rectangular wall-panels, recalling those formed by the bamboo framework of a Bengali hut. Internally, monolithic columns of Hindu type and, often enough, of Hindu origin were frequently used to divide the aisles and support the domes; and, for the further support of the latter, there was a great liking for pendentives of corbelled brickwork, each alternate course projecting angle-wise and so producing a not unpleasant toothed appearance, vaguely recalling honeycombing. Finally, the engrailed arch with its incrustations of ornament was elaborated joyously by the Bengali, who usually added to the design a central pendent lamp or bell which itself sprouted exuberantly into flowers and leaves and grape-like bunches. This floreate patterning was still relatively restrained at the beginning of the fifteenth century, but a century later it had become a riotous jungle-growth beyond all rational control.

Phase II (A.D. 1575-1612). This phase was one, less of true transition, than of uncertainty. Its terminal date is arbitrary, and might plausibly be extended to A.D. 1640, or even later. In the last quarter of the sixteenth century the Moghuls were advancing from West Bengal, and elements of their style, such as the use of the triple entrance, sometimes with higher central arch, and the introduction of a battlemented cresting, began to appear sporadically alongside and intermingled with the more native tradition described above. The phase is not one of any great importance. The country was in a constant state of disturbance, and the surprising thing is not that there was so little new construction, but that there was any at all.

Phase III (after A.D. 1612). The settlement of the province and the establishment of its capital at Dacca, a site accessible to maritime trade and at the same time strategically convenient for the control of the eastern frontier by land, sea and river, was followed, though not immediately, by a great outburst of building activity. In this remote region, muoh depended upon the idiosyncrasy of the viceroy for the time being; and it was not until the middle and second half of the century that a succession of enterprising governors systematically undertook or encouraged the enrichment of the province (and particularly its capital) with mosques and other buildings of the first order. The architectural development of the eastern part of the Moghul empire thus reached its maximum rather more than a generation later than that of the west, and so represents the Moghul style, or complex of styles, when they had passed their prime. If, however, there is no Moghul architecture in East Pakistan that can rival Shāhjahān's

work at Delhi or Lahore, there are many buildings at Dacca and elsewhere which preserve, with a touch of local idiom, something of the imperial dignity that is rarely lacking in the Moghul style until after the time of Aurangzēb.

The Moghul architects restored to Bengal certain centralizing features which were traditional in Persian design but had become obscured in the highly provincialized pre-Moghul Bengali style. These features included a dominant central dome and a tall central entrance, the latter emphasized by being inset in a taller half-domed outer arch and often by being framed in a slightly projecting bay with flanking pilaster-minars. The result of this arrangement was an easy concentration of the eye upon the centre of the building, enclosing the principal mihrāb; and this concentration was further encouraged by the normal restriction of subsidiary openings on the main façade to one on each side, producing the three-arched pattern which was also, in origin, a Persian mode. Arches were now usually four-centred, not, as in pre-Moghul design, two-centred, and the multiple cusping popularized by Shāhjahān was readily adopted in a province where the spiked or engrailed arch had long been familiar. Wall-panelling retained its vogue, but the rectangular panels now enclosed four-centred or multi-cusped arches, or an arch with curved shoulders and a long, straight, horizontal top which is characteristic of Aurangzēb's reign. A battlemented cresting of unpierced merlons crowns the elevation and girdles the base of the domes externally and, more rarely, internally. The convex Bengali cornice is now almost unknown, but a vestige of it is sometimes retained in the framing of the panelling. Plaster ornament replaces terracotta, and there is a fondness for the Persian intersecting-rib or trellis-pattern in plaster-relief, particularly in the half-domes over the entrances.

Altogether, the design of Moghul building in Bengal is better focused, lighter, less dungeon-like, than that of the local tradition. If at the same time it tends to lack individuality and local genius, it suffers from the inevitable handicap of an essentially imperial and imposed style. It should, however, be emphasized that the intrusive element is confined mainly to the provincial capital of Dacca. Elsewhere in the Bengali countryside, the pre-Moghul modes lingered on, with varying and often insignificant influence from the new metropolitan fashions. In other words, the local tradition was supplemented rather than transformed by the advent of the Moghuls.

20. PHASE I: PRE-MOGHUL (PRIOR TO A.D. 1575)

FROM this general sketch we turn to selected examples of the three main architectural phases which we have been able to distinguish. Our first examples are chosen to illustrate the pre-Moghul period, roughly equivalent, so far as East Bengal is concerned, to the fifteenth and sixteenth centuries.

The monuments described below chronologically are exclusively mosques and mausolea, the equivalent domestic structures having been almost totally obliterated. These religious structures exhibit certain common characteristics which may be grouped under the following sub-classes.

A. *Pavilion type.*—This type is illustrated only by the tomb-building of Ghiyāth-ud-dīn A'zam Shāh, which, as described below, originally consisted of a pavilion on stone pillars. The type is an imitation of the *barādaris* of Delhi.

B. *Oblong type with central nave vaulted or roofed over by pyramidal domes, with multi-*

domed side-wings.—The earliest example of this type in Bengal is the famous Adina Mosque at Hazrat Pānduā, built by Sultān Sikandar Shāh in the year A.D. 1369 or 1374. This is an oblong structure, divided into a central nave and two side-wings. The central nave is covered by an elongated vault, which is but a continuation in depth of the main front arch. The wings, which are several aisles deep, are roofed by low hemispherical domes, their number depending on the number of interspaces formed by the division of the whole wing into bays and aisles. In East Pakistan this type is represented by the Darasbārī mosque at Gaūr. The Chhoṭā Sonā Masjid should also be included in this sub-class; its central nave is covered by a pyramidal Bengali roof, which is an echo of the type evolved at the Adina mosque.

C. *Square single-domed type.*—The earliest building of this type is the Eklakhi mausoleum at Hazrat Pānduā, traditionally famous as the tomb of Jalal-ud-dīn Muḥammad Shāh (A.D. 1418-1431), the proselyte son of Rāja Ganeśa, or Kans as he is known to the Muslim historians. Its dimensions are nearly square, being 78½ feet by 74½ feet externally, changing into an octagon of 48½ feet diameter on the inside. There are four arched doorways (fitted with door-frames from Hindu monuments), one on each face, and there is a cell within the thickness of the wall at each of the four corners. The semi-circular dome rises directly from the octagon of the interior. There is no cylindrical or octagonal drum below the dome, which looks low and stunted. In East Pakistan the earliest monument of this type is Khān-i-Jahān 'Alī's tomb at Bagerhāt. The type was also copied in some of the mosques, *e.g.* in Darya Saudagar's mosque at Barā Goālī. It occurs in Persian architecture at least as early as the tenth century A.D., and has been derived by some writers from Sasanian fire-temples of pre-Islamic times.

D. *Multi-domed oblong type.*—This is an oblong structure divided into several aisles by rows of pillars supporting the arches of the domes, with a range of prayer-niches in the back wall and a corresponding range of arched openings in the front. The roof consists of successive rows of small low domes, their number depending on the number of inter-spaces formed by the division of the building into bays and aisles. The oldest extant building of this class in Bengal is at Bagerhāt and is associated with the name of Khān-i-Jahān 'Ali, who is recorded in an inscription to have died in A.D. 1459.

E. *Single-domed mosque with corridor or "narthex" in front.*—This type is a further development of the sub-class C. The square hall of the mosque is spanned by a single dome, while the corridor is covered either by three smaller domes or by a vaulted roof. The earliest extant type in East Pakistan appears to be the mosque at Masjidbari erected in A.D. 1465, the only other older specimen in Bengal being the Gopalganj mosque in the Indian portion of Dinajpur district, erected in A.D. 1460.

THE GRAVE OF GHIYĀTH-UD-DĪN A'ZAM SHĀH
(SUB-CLASS A)

The earliest Muslim monument in East Pakistan appears to be the ruined tomb ascribed to Ghayāth-ud-dīn A'zam Shāh (A.D. 1389-1409) a mile north-west of the village of Mograpara Hāt, on a part of the ancient site of Sonārgāon (see p. 105). The tomb is of black basalt and is a panelled table with a plain top-stone of simple pointed-barrel form. The eastern side of the table retains three carved panels, each panel consisting of an engrailed arch carried on baluster-pillars, with rosettes in the spandrels and a floreate lamp hanging from the apex of the arch. There are traces of a similar panel on the northern end, and other decorative fragments are said to have been removed to the Indian Museum, Calcutta. The tomb is reported to have been surrounded by pillars about 5 feet high, which presumably carried a canopy or pavilion, and at the head of the tomb lay a sand-

stone pillar which had doubtless, when erect, been used as a *chirāghdān* or a stand for a light.

The Shāh was a picturesque figure, with the combined cruelty, culture and sentiment of his age. The machinations of his stepmother drove him reluctantly into armed conflict with his father, Sikander. the second of the independent Iliyās rulers of Bengal, who was mortally wounded in the battle but died in his son's arms with forgiveness on his lips. A'zam proceeded to blind all his seventeen stepbrothers—a perfectly normal procedure, with the added refinement that he sent their eyes to the stepmother. Other stories of a more attractive kind are told of him. One of them shows him as a correspondent of the great Persian poet Hāfiz, whose (modern) tomb is still an object of veneration at Shīrāz. The story is thus told:

> " A'zam, stricken down by a dangerous malady, abandoned hope of life and directed that three girls of his harem, named ' Cypress,' ' Rose,' and ' Tulip,' should wash his corpse and prepare it for burial. He escaped death and, attributing his recovery to the auspicious influence of the three girls, made them his favourites. Their advancement excited the jealousy of the other inmates of the harem, who applied to them the odious epithet *ghossala*, or corpse-washer. One day the king, in merry mood with his three favourites, uttered as an impromptu the opening hemistich for the ode, ' Cupbearer, the tale now runs of the Cypress, the Rose and the Tulip,' and, finding that neither he nor any poet of his court could continue the theme satisfactorily, sent his effusion to Hāfiz at Shīrāz, who developed the hemistich into an ode and completed the first couplet with the hemistich: ' And the argument is sustained with the help of three morning draughts,' the word used for ' morning draught ' being the same as that used for ' corpse-washer.' The *double entendre* was more efficacious even than the king's favour, and secured the three reigning beauties from molestation."

Another story goes as follows:

> " One day, while practising with his bow and arrow he accidently wounded the only son of a widow. The woman appealed for justice to the qazi, who sent an officer to summon the king to his court. The officer gained access to the royal presence by a stratagem and unceremoniously served the summons. A'zam, after concealing a short sword beneath his arm, obeyed the summons and, on appearing before the judge, was abruptly charged with his offence and commanded to indemnify the complainant. After a short discussion of terms the woman was compensated, and the judge, on ascertaining that she was satisfied, rose, made his reverence to the king, and seated him on a throne which had been prepared for his reception. The king, drawing his sword, turned to the qazi and said, ' Well, judge, you have done your duty. If you had failed in it by a hair's breadth I would have taken your head off with this sword !' The qazi placed his hand under the cushion on which the king was seated, and, producing a scourge, said, ' O king ! You have obeyed the law. Had you failed in this duty your back should have been scarified with the scourge !' A'zam, appreciating the qazi's manly independence, richly rewarded him."

Such stories may serve as a substitute for the missing canopy of the royal tomb.

THE TOMB OF KHĀN-I-JAHĀN 'ALĪ
(SUB-CLASS C)

Little is known of Khān-i-Jahān 'Alī, whose tomb was built at Bagerhāt about A.D. 1459, but he appears to have been a personage of some local importance. He was apparently an ambitious officer of high rank in the military service of the Delhi empire, and, taking advantage of the disorder prevailing in the central administration, he slipped out of Delhi and is supposed to have proceeded to South Bengal and to have established himself there, first as a religious preacher. His influence seems to have assumed a secular character, and he became a self-appointed leader in the countryside, owing no formal allegiance to any ruler. His tomb is a low square brick building with small circular towers at the corners; a type of building not uncommon in Bengal but derived ultimately from Persian architecture where the square tomb with central dome and four domed corner-turrets was known at least as early as the tenth century and may go back to the Sasanian fire-temples of pre-Islamic date. A purely Bengali feature of the present tomb is the convex cornice on each face, emphasized by a triple string-course. In the centre of each side is an opening under a two-centred arch, with a horizontal stone lintel across the springing on the inner face, a feature with fourteenth-century analogies at Delhi. The hemispherical dome is raised to cornice-level on a cylindrical drum, and is carried on squinches. The interior was plastered and doubtless decorated, but all ornament has vanished. The tombstone is of pointed-barrel form, like that of A'zam (above, p. 112), and stands on a triple stone podium. The tombstone itself and the two upper stages of the podium bear the names of God and Quranic verses; the lowest stage and the floor of the chamber show traces of hexagonal encaustic tiles. The tomb as a whole is of no distinction but is characteristic of the simpler monumental architecture of Bengal in the fifteenth century A.D.

Just to the west of this tomb and within the same compound is a grave attributed to Moḥammed Tahir, or Pīr Alī, a converted Brahman who became Khān-i-Jahān 'Alī's prime minister.

THE SHAṬH GUMBAD MOSQUE OF KHĀN-I-JAHĀN 'ALĪ
(SUB-CLASS B)

Three miles south-west of Khān-i-Jahān 'Alī's tomb is a brick mosque which is associated with his name and is called *Shaṭh Gumbad* (sixty domes), although it actually has no fewer than seventy-seven (pl. XXA). Like the tomb, it was built about A.D. 1459, and, also like the tomb, it represents externally the average standard of medieval Bengali building-design, with a somewhat wearisome repetition of undistinguished features. At the four corners are sturdy circular domed towers with "battered" or inward sloping walls of typical fourteenth-century Delhi type; between those on the main front are eleven slightly recessed openings with two-centred arches, the central opening somewhat higher than the others. Above them the cornice, instead of having the usual Bengali convex elevation, slopes upwards in straight lines towards a small triangular pediment over the central bay. Internally the building is divided into eleven aisles from north to south and seven from east to west, with two-centred brick arches at the intersections carried on slender octagonal pillars, mostly of stone. The seven central bays have pyramidal domes, but the others are each surmounted by a hemispherical dome with pendentives formed by corbelled brickwork, alternate courses being carried on the projecting angles of a course of bricks set diagonally and thus forming a tooth pattern. The only features of any elaboration are the mihrābs, which have two-centred engrailed arches on octagonal pillar-jambs

within a gate-like framework decorated in low relief with rosettes, niches and tendril-pattern.

It cannot be claimed that the building is a success either in general design or in decoration. Its sturdiness is derived remotely from the fourteenth-century architecture of Delhi but without the convincing imaginative strength which informs the latter at its best; and at the same time it lacks the compensating wealth of ornamental detail which lends interest and a sort of lacework beauty to the better examples of Bengali building. The monotony of its domes and arches is unredeemed even by the assertive unconventionality of its broken-backed facade.

MOSQUE AT MASJIDKUR
(SUB-CLASS D)

At Masjidkur, not far from Bagerhāt, is another mosque which is also attributed to Khān-i-Jahān 'Alī, and may well be the work of the same rather unimaginative architect as the *Shaṭh Gumbad*. Here happily there are only seven lines of uniform domes from north to south and three from east to west, and the straight upward-sloping cornice lacks the central pediment. The seven small two-centred openings of the façade are lost in massive brick walls nearly 7½ feet thick, and the prison-like aspect is emphasized rather than mitigated by a tiny decorative niche over the central archway and by a fringe of rosettes below the cornice. At the corners are once more the four Tughlukian towers. The best that can be said of the building is that it is a stern and defiant reaction to a double-monsoon climate.

The ruins of another mosque of the same type can be seen at Īswaripur (Kulna district).

MOSQUE AT MASJIDBARI
(SUB-CLASS E)

At Masjidbari, in the district of Bakarganj, is a mosque recorded by inscription to have been erected by Khān Moazzam Ozyal Khān in A.H. 870: A.D. 1465. It is thus the earliest monument of the Muslim occupation of this area by Rukn-ud-dīn Barbak Shāh (A.D. 1459-74).

The mosque (fig. 18) is an oblong structure, measuring externally 50 feet by 36 feet, and consists of a square single-domed prayer-chamber with a vaulted corridor or narthex on the east. At the four corners are octagonal turrets with mould bases. The eastern facade has three entrances with two-centred arches, but is devoid of ornamentation; even the Bengali curved cornice is missing. The dome is hemispherical and is carried on squinches. There are three mihrābs, originally highly ornate.

THE MOSQUE OF BĀBĀ ĀDAM SHAHĪD
(SUB-CLASS D)

Sufficiently close in style and date to the Masjidkur and Shaṭh Gumbad mosques for comparison and yet strikingly better balanced and more intelligent in design is a brick mosque at Vikrampur built, as an inscription upon it records, in A.D. 1483. The mosque is associated with the name of a saint, Bābā Ādam Shahīd, who is buried near by and is said to have lost his life in a fight against the Hindu king Vallāla Sena, whose son, Lakshman Sena, was traditionally the founder of Lakshmanāvati (Gaūr) in the middle of the twelfth century A.D. It has the four corner-towers of the series, but here these are

MOSQUE AT MASJID BARI, DISTRICT BAKERGANG

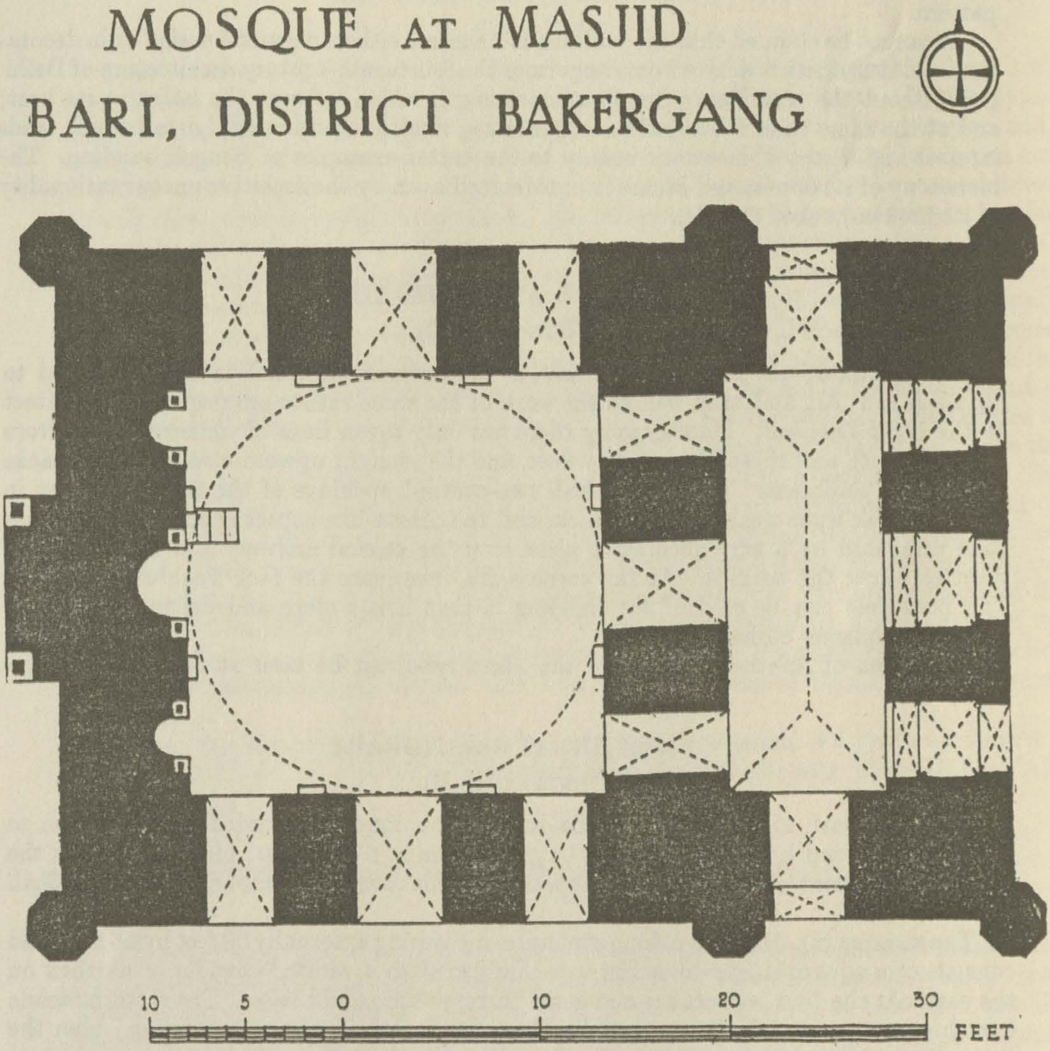


FIG. 18 (*sketch-plan*)

octagonal and slender, broken by decorative string-courses, and harmonize with the character and purpose of the building. The façade has three equal two-centred arches within a slightly projecting framework which gives light and shade and is further diversified by intermediate niches with engrailed two centred arches on octagonal pilasters and with pendent bells or lamps, all in terracotta. The cornice above is gracefully convex in the Bengali fashion, and above it appear three hemispherical domes. Within are double aisles with two octagonal pillars of polished stone and brick responds, and in the west wall are three richly decorated mihrābs with engrailed two-centred arches (now much patched) and terracotta panelling. All three mihrābs project externally. The general effect both inside and out is at the same time restful and varied.

MOSQUE AT SURA IN DINAJPŪR DISTRICT

(SUB-CLASS E)

At Sura, 14 miles due east of Hili, a town in Dinajpūr district, is a mosque built in the style already evolved in the Lattan Masjid (A.D. 1475) at Gaūr. Like the Chhoṭā Sonā Masjid at Gaūr, it is faced both externally and internally up to a certain height with stone, which is carved in shallow relief with floral designs copied from the local terracotta art. It is a square room, 16 feet each side, covered by a single dome, with a verandah or narthex in front. But while at the Lattan Masjid the verandah is of the same length as the main chamber, at Sura it is 17½ feet longer, projecting equally on both sides. It has three arched openings in front and one at each end, and its roof is covered by three hemispherical domes supported below by carved stone pillars. The mosque itself has three arched openings in front and one each at the north and south ends; and in the west wall are three richly decorated prayer-niches. The square of the room is changed into an octagon by arches springing from carved black stone pillars, two on every side. Octagonal turrets project from the four corners of the verandah and the two western corners of the main chamber.

The addition of the verandah or corridor and consequently of two more corner turrets in certain of these mosques, as in the Bara Sonā Masjid at Gaūr, marks a new style in Bengal. The open quadrangle of the Delhi mosques was not suitable to the Bengal climate, and the domed verandah took its place. On grounds of style, the mosque at Sura may be dated to the close of the fifteenth century A.D.

THE DARASBĀRĪ MOSQUE AT GAŪR

(SUB-CLASS B)

Half a mile to the south-west of the Kotwāli Gate at Gaūr are ruins and a large inscription, over 11 feet long, referring to the building of a mosque in A.D. 1479, in the time of the independent sultan Yūsuf Shāh. The traditional name of the site, Darasbārī (college), presumably implies that a college was at one time associated with the mosque. The latter is 111½ feet by 67½ feet, and must have been a fairly imposing structure not unlike the Small Golden Mosque (see below). It has a central nave 16½ feet broad, with a row of three pyramidal or barrel-vaulted domes and two side-wings, each formerly with nine domes in three rows supported on stone pillars. The domes have disappeared, but the walls still stand, and the mihrābs are decorated with elaborately moulded brickwork.

THE CHHOṬĀ SONĀ MASJID, OR SMALL GOLDEN MOSQUE OF GAŪR

But the most celebrated mosque in East Pakistan is the Chhoṭā Sonā Masjid, or Small Golden Mosque at Firuzpūr, Gaūr, built by Walī Moḥammad during the reign of Husain Shāh (A.D. 1493-1519), and so named to distinguish it from the Great Golden Mosque built a few years later five miles away at Ram Kali. Both mosques originally had gilded domes, and the latter, which is in West Bengal and does not therefore concern us here, was sparingly ornamented with green, blue, white, yellow and orange tiles.

The smaller mosque (pls. XXB and XXI, and fig. 19) is an oblong building 82 feet by 52 feet externally, and is divided internally into three longitudinal aisles entered by five uniform openings from the front. The openings have engrailed two-centred arches, slightly inset to give relief, and the façade is further diversified by intermittent string-courses which emphasize the main features. At the four corners are octagonal turrets divided into stages by further string-courses, and the multiple cornice has the usual Bengali convexity

on all elevations. A brave but somewhat unsightly attempt has been made on the front and back to vary the monotony of the hemispherical domes over the fifteen internal bays by substituting a pyramidal Bengali roof with curved eaves for the central series.

Externally, and internally up to the arches and domes, the brickwork is completely veneered with stone. The hemispherical domes are carried on pendentives of corbelled brickwork, as at the *Shaṭh Gumbad*. In the south-west corner a bay has been set aside for women, with an upper floor formerly screened by trellis-work.

The chief interest of the mosque lies in its rich foliate decoration, carved in shallow relief both externally and internally. This decoration is a stone reproduction of the elaborate terracotta ornament characteristic of Bengal, and has the appearance of wood-carving or even of filigree. It is entertaining and painstaking but is not strong enough to hold its own architecturally. Altogether, the building is a patchwork of skills and traditions, and lacks cohesion and unity of purpose. It is one of the last efforts of a style which never really succeeded in welding together the robust military traditions of Delhi (even though fortified by the need for large roofed halls and small openings imposed by the local climate) and the traditions of elaborate clay ornament and sculpture inherited from pre-Islamic Bengal.

MOSQUE AT BAGHA IN RĀJSHĀHI DISTRICT
(SUB-CLASS D)

At Bagha, now an obscure village in the Sadar sub-division near the Ganges, 25 miles south-east of Rājshāhi, stands an old mosque beside a large tank, 400 yards in length and 200 yards in breadth. To the east of the tank is a place called Makhdūmpūr, where lived in the early part of the sixteenth century A.D. one Ala Bakhsh Barkhūrdār Lashkari, a *jagīrdār* of Pargana Lashkarpūr who had received his *jagīr* from 'Alāud-dīn Husain Shāh (A.D. 1493-1519), an independent sultān of Bengal. The jagīrdār's daughter, Zebun-nisā, was married, of her own choice, to Hazrat Maulānā Shāh Mua'zzam Daūla, who had recently come as a missionary saint with five disciples from Baghdad. For his residence, the saint chose the tiger-haunted forest hereabouts, which became known as the Bagha (from *bagh* meaning a " tiger ").

The inscription over the central doorway of the mosque adds that it was built in A.D. 1523-24 by Abul Muzaffar Nāsirud-dīn Nuṣrat Shāh, son of 'Alāud-dīn Husain Shāh, doubtless to do honour to the saint.

The reign of Nusrat is notable for two invasions: that of the Moghuls under Bābur in the west and that of the Portuguese in the east. With the Moghuls the Bengali king temporized; in any case, the time was not yet ripe for the Moghul annexation of his kingdom. The Portuguese were delivered by circumstances and treachery into his hands at Gaūr and into those of his neighbour at Chittagong. But the days of independent Bengal were already numbered, and the art and architecture which had characterized it for two centuries were now overripe. It may be added that the Bagha saint's grandson, Shāh Abūl Wahhāb, subsequently received a *jagīr* from the rebellious prince Khurram (afterwards Shāhjahān), which was later confirmed by the prince's father, the emperor Jahāngīr, and still continues in the hands of the saint's descendants, who are also *mutawallī* of the mosque.

The building stands in the western half of a raised enclosure, 160 feet square, with brick walls and a gateway in the north and south walls. The northern gate has been rebuilt; the southern is a simple oblong structure with octagonal corner-turrets, two-centred arch and central dome. On each flank of the opening is a terracotta panel representing a plant issuing from a flower-vase. Within the north-east corner of the enclosure are the graves of the saint and his five disciples, together with a few unknown burials.

CHHOTA SONA MASJID
GAUR

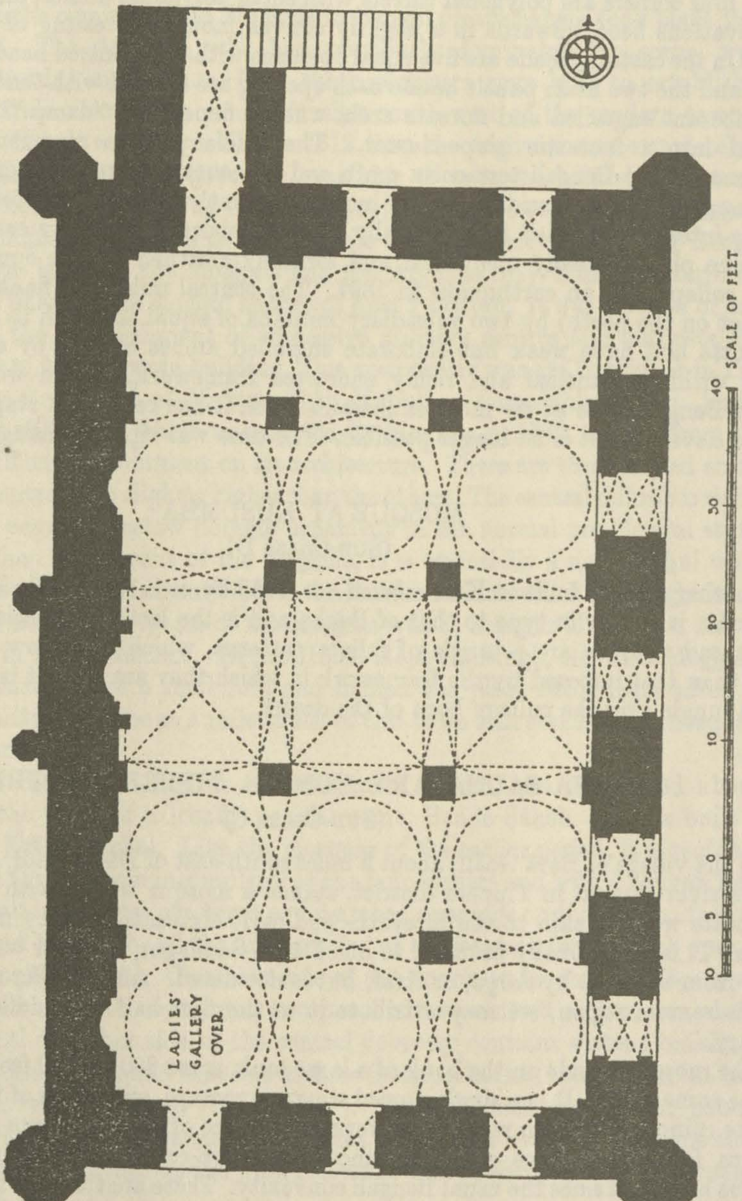


FIG. 19 (*sketch-plan*)

The mosque itself is an oblong structure 86 feet long externally, with walls 7 feet 4 inches thick. It is of brick save for a basal course of stone, another stone course at the level of the springing of the arches, and eighteen stone pillars and responds in the interior. At the four corners are polygonal turrets with small polygonal domes, and between them the elevations bend upwards in a slightly convex moulded cresting of normal Bengali type. On the eastern façade are five equal openings with two-centred heads set in panelled walls; and the two main panels beside each opening are framed with tendrils and contain an exuberant engrailed and floreate arch, whence depends a "lamp" which has itself evolved into a fantastic grape-cluster. The whole pattern represents the baroque decadence of the Bengali terracotta craft, and its constant repetition on all sides of the building gives the impression of sugary incrustation rather than of architectural ornament.

The interior is divided longitudinally into two aisles of five bays each, separated by the stone pillars already mentioned and formerly crowned by ten equal domes, all of which collapsed in an earthquake in 1897. The central mihrāb is flanked on the south (but not on the north) by two subsidiary mihrābs of equal size with it. All three are of terracotta and have weak but elaborate engrailed arches carried by ornate octagonal pillars within a panelled and richly encrusted framework. Again we are confronted by the Bengali style at its most exuberant, when it has reached a stage beyond which further development is no longer possible. The time was ripe for change.

MOSQUE AT KUSUMBA
(Sub-Class D)

Another mosque built at Kusumba in A.D. 1558 by, it is said, a Hindu convert named Sulaimān, is similar in type to that of Bagha and is the last of the series. Its terracotta panels and mihrābs are a tangle of foliate patterns, which have now lost all restraint other than that imposed by the framework in which they are set. It is the final victory of the jungle over the culture born of the desert.

DARYA SAUDAGAR'S MOSQUE, TIPPERA DISTRICT
(Sub-Class C)

In the village of Barā Goālī, about 5 miles south-east of Dāūdkandī, a steamer-station on the river Gomatī in Tippera district, stands a mosque which, with its highly ornate terracotta work, is akin to the fifteenth- and early sixteenth-century mosques described above. It is traditionally ascribed to one Darya Saudagar, a trader who is said to have come from the west by *darya*, or river, but is not dated. Allowing for a certain time-lag in this remote region, we may attribute it to the first half or middle of the sixteenth century.

The mosque stands on the bank of a large tank, some 800 by 500 feet, which is known by the same name. It is a single-domed square structure, with sides of 27 feet externally, but its ruinous condition renders the former presence of corner-turrets uncertain. In the eastern façade are three equal entrances with two-centred arches, and the moulded cornice has on all sides the usual Bengali convexity. There are traces of formerly extensive terracotta decoration. The hemispherical dome is carried on squinches, with subsidiary pendentives, the squinches being supported on slender brick pilasters. There are three mihrābs, originally ornate, and arched wall-niches flank the single doorways in the north and south sides.

In spite of its poor condition, the building is of interest as an outlier of the main series of medieval Bengali mosques.

21. PHASE II: EARLY MOGHUL (A.D. 1575-1612)

WITH the coming of the Moghuls to Bengal great changes took place in the political field. The Afghans, who had previously dominated the scene, were dispersed eastwards, and in A.D. 1575 the newcomers were able to establish their headquarters at Tānda near Gaūr, some 15 miles south-west of the modern town of Malda in West Bengal. But it was not until A.D. 1612 that the Afghans were completely beaten, and that Islām Khān, the Moghul governor, was able to take the bold step of transferring the capital to the eastern frontier at Dacca (p. 104). With the completion of the conquest that this event signalized, dawned a period of peace and prosperity throughout Bengal.

The struggle between the Moghuls and the Afghans may thus be described as the first or preliminary phase of the Moghul history of East Pakistan. It was a period of active military movement, of the establishment of successive military centres and outposts on both sides, with little leisure for elaborate building. One such centre was at Chatmohar in Pabna district, which was the stronghold of Ma'sum Khān Kabuli, a formidable Afghan leader. There a ruined mosque still exists which was erected by him in A.D. 1582, though from the preserved portion it is difficult to comment on its architecture. There are three arched entrances on the east face, the central arch slightly higher than the others. The central mihrāb is richly decorated, its arch being engrailed below floreate ornament in the normal pre-Moghul style. Although strictly later than the advent of the Moghuls, it is essentially a non-Moghul work, save that the use of three graded arches anticipates the Persian fashion which the Moghuls introduced.

One of the military outposts of the Moghuls was at Shērpūr Murcha on the west bank of the Karatoya in Bogra district. In A.D. 1595, Rājā Mānsingh, the then Moghul governor of Bengal, constructed here a mud fort and named the place Salimnagar after prince Salīm (afterwards Jahāngīr). About a mile south of this town still stand three mosques in a dilapidated condition.

One of the mosques is known as the Kherua Masjid, and is situated about 100 yards south-east of the tomb of a locally popular saint, Bande Ṣāḥeb. It was built in A.D. 1582 by one Murād Khān Qāqshal. Like the mosques of the earlier period, it is rectangular in plan with octagonal turrets (now incomplete) at the four corners and with a convex Bengali cornice on all the elevations. There are three equal-arched openings on the eastern face and one each on the north and the south, all the arches being of two-centred form. Each opening is framed within a rectangular panel. On either side of the doorways on the east face is a rectangular panel of the same height, containing two panelled two-centred arches, one above the other. The upper panel on either side of the central doorway contains a stone building-inscription. On removal, it has been found that one of these inscriptions has been cut on the back of a stone bearing a high relief of Sūrya (the sun-god). An additional rectangular panel, containing horizontal rows of moulded bands and rosettes, is inserted between the stone tablets and the flanking doorways. Further up the wall, below the curved cornice, runs a row of arched panels of smaller size.

The mosque measures externally 57 feet long by 24½ feet wide, with walls 6 feet thick. It is divided internally into three equal square bays covered by domes, which are carried on characteristic Bengali corbelled-brick pendentives. In the western wall are three mihrābs, each framed within a rectangular panel, with a battlemented cresting above the central niche. The spandrels of the arches are decorated with rosettes and floral design, and the arches

are bordered by engrailed decoration. Two smaller *taqs* or niches are provided on either side of the doorways in the north and south walls.

Here, as at Chatmohar, is the beginning of the three-bay façade which became common in the Moghul period in East Pakistan. Each bay is covered by a hemispherical dome resting on side-walls and arch—the arch springing directly from the side-walls without responds. The previous use of pillar-responds as a support for the arch has been discarded.

Other buildings of similar transitional style occur in the Bogra district and elsewhere, but are of later date and are, therefore, referred to the next chapter.

22. PHASE III. LATER MOGHUL (A.D. 1612 OR LATER-1707)

BY far the largest concentration of developed Moghul architecture in East Pakistan is that of the Dacca district, where a succession of viceroys related to, or intimates of, the imperial house built extensively in what may be described as an Imperial Style. In other, less metropolitan districts, such as Bogra and Mymensingh, local Bengali traits survived with some vigour until the middle of the seventeenth century, and occasionally recurred at considerably later dates.

A. THE DACCA DISTRICT

'IDGĀH NEAR DACCA

About 1½ miles north-east of the municipal limit of Dacca are the remains of an *'idgāh* (unroofed place of assembly for prayer at certain festivals or *'ids*), of plastered brickwork, built, as the inscription over the mihrāb records, in A.D. 1640, by Mīr Abūl Qasim, who was the dewan of the unfortunate prince Shāh Shuja' when viceroy of Bengal. Although of slight importance architecturally, the building is of interest as one of the earliest surviving dated monuments of Dacca.

The *'idgāh* stands on a slightly raised platform, some 245 by 135 feet, round which on the north, east and south sides are remains of a parapet wall said formerly to have been 6 feet high. The screen wall on the west side, about 15 feet high, contains a central semi-octagonal mihrāb with a four-centred stilted arch decorated with multiple cusping applied to the outer face and flanked on each side by a multi-cusped panel. On each side of the mihrāb three wall-arches or subsidiary mihrābs with stilted four-centred heads survive, but the wall, still 85 feet long, is incomplete at both ends. Save over the central mihrāb, it is crowned by a battlemented cresting.

THE BARĀ KATRĀ

Close to the north bank of the river at the head of the famous market-place called the *Chank* stand the remains of a plastered brick structure known as the Barā Katrā (to distinguish it from the (modernized) fragments of the Chhotā Katrā a short distance away), built, according to an inscription now destroyed, in A.D. 1644 by Mīr Abūl Qāsim, already mentioned as dewan during the viceroyalty of prince Shāh Shuja'. The Mīr is stated to have endowed it "with twenty-two shops attached to it," and, whatever its original purpose may have been, it appears to have been used as a caravanserai.

The surviving portion consists of the river-frontage, about 200 feet long, with a lofty central gateway, octagonal corner-towers, and a part of the adjacent east and west walling.

Between the gate and the corners, on each side, were five further openings, but modern alterations and accretions obscure the arrangement in detail. The gateway projects, is of three storeys, and is panelled. The main gate-chamber has a dome decorated with plaster network, and is entered front and rear through archways with four-centred heads under high arches with half-domes bearing remains of similar network. Between the outer opening and the main chamber are a small guardroom on each side and a subsidiary entrance-archway. The underside of all the arches is ornamented with network, and other fragments of decoration are preserved here and there in the decayed plasterwork. The wall-panels which break the surface of the building show a variety of forms, including plain four-centred and multi-cusped arches together with the flat arch, which is a distinctive feature of mid- and late seventeenth-century work hereabouts. The parapet has a "blind" battlement, *i.e.* it is decorated with ornamental unpierced merlons.

The fragment, although now entangled in slum-structures, is a not unimposing relic of the secular architecture of the period, and is earlier in date than most of the remaining monuments of the Dacca district.

THE LĀLBĀGH FORT

Towards the north-western end of the old town are the remains of a brickwork fort, known alternatively as "Fort Aurangabād" or the "Lālbāgh Fort," begun in A.D. 1678 by prince Moḥammad A'zam, third son of the emperor Aurangzēb, during his viceroyalty at Dacca, but left unfinished owing to his sudden departure in 1679 to join his father in the war against the Mahrattas. The finished portions consisted of the main north and south gates, which were presumably intended to be central on plan, together with the wall (about 2,000 feet long) and bastions between the south gate and the south-western corner, and most of the western side. Between the north gate and the north-western corner is a third, smaller gate, but there is no evidence that the intervening wall was ever begun on this side. The south-western corner, formerly washed by the river Buri Ganga, is separated by a stretch of meadow and huts from the present bank.

It was apparently intended to reinforce the brick defensive wall in part by an internal bank, which exists to the east of the south-western corner and contains cisterns or store-rooms entered by a doorway under a half-dome ornamented with plaster network. Further east, remains of arcaded brick buildings with plastered panel-decoration occupy the line of the bank up to the south gateway. Between the latter and the south-west corner are five semi-octagonal bastions filled with earth to rampart-level. The bastion next to the gateway is of exceptional size with an external gun-platform 13 feet wide at that level; above the platform, the tower shrinks to normal size, with walls 3 feet 9 inches thick, a high four-centred and stilted doorway in each face and panel-decoration. The south-western corner-tower has an equivalent external platform, but only 4 feet 9 inches wide. All the bastions have an ornamental battlemented string-course at rampart-level.

The principal architectural feature is the south gate, which is a three-storeyed structure with a four-centred archway framed in stonework under a (fragmentary) brick half-dome bearing traces of plastered net-pattern. Of the three flanking stages, the lowest on each side has a four-centred, half-domed niche with similar decoration, whilst the upper two are fronted by a three-sided oriel window in two stages, terminating in a half-dome. The window-openings are framed by pillars supporting moulded brackets. On the inner elevation, the two corners are still crowned by small domed pavilions.

The gateway, like other features of the fortifications, is that of a palace rather than a fortress, but was presumably an adequate defence against the river-piracy which formed

the basis of such intermittent "warfare" as enlivened this frontier-region in the seventeenth century (see p. 106). Prolonged siege by an enemy adequately equipped for the purpose was not in contemplation.

THE TOMB OF BĪBĪ PARĪ

Within the unfinished Lālbāgh fort stands a tomb of outstanding interest, by reason alike of its materials and its construction. In a land of almost monotonous brickwork, this tomb is built throughout of stone: black basalt from Gaya in Bihār, grey sandstone from Chunār in U.P. and marble from distant Rajputana. These costly materials were assembled by Shāista Khān, viceroy of Bengal, for the mausoleum of his daughter, Irān Dukht, better known by her pet name Bībī Parī ("Lady Fairy"), who had, it seems, been betrothed to his predecessor prince Mohammad A'zam but died in A.D. 1684.

The tomb is square on plan, with three openings on each side under high four-centred arches of which the middle is the largest. At the four angles are octagonal turrets capped by pavilions with *chajjas* or pents and fluted domes. The walls are covered with rectangular panelling. The central burial-chamber is about 19 feet square, and is surrounded by rooms alternately nearly 25 feet by 11 feet and 10 feet by 9 feet, the smaller rooms being at the four corners. The walls of the burial-chamber are of white marble panelled with black lines, and the floor is patterned with the same materials. The walls of the four adjacent larger rooms are also of lined marble, but those of the four corner rooms were formerly veneered with glazed tiles, now removed. The colours of the tiles were dark blue, orange, green and purple on a yellow ground, with borders of orange and lilac flowers on a green ground. In view of the scarcity of tilework in East Pakistan, the loss of this feature within the last fifty or sixty years is particularly regrettable.

But the most remarkable element in the structure is its series of corbelled roofs, built Hindu-fashion with overlapping layers of basalt, closely simulating timber-work. The roof of the central chamber takes the form of an octagonal pyramid, crowned externally with a small polygonal dome of no structural significance. The side rooms are roofed in a similar manner but on rectangular plans. There is nothing quite like this roof-system in Bengal, and the presence of an architect from a region of heavy-timber architecture somewhere in the north-west may be suspected. If the materials were imported from so far afield, as they undoubtedly were, there is no reason why the architect should not also have been an importation.

The original doors of the tomb are of sandalwood and are panelled with a square swastika-pattern, which may also be of Hindu derivation but is equally akin to a Chinese motif; and Chinese motifs, received by way of Persia, are of not infrequent occurrence in Moghul art.

The gravestone is of white marble and is in three steps, each step carved on the face with a simple flower-pattern in shallow relief.

MOSQUE NEAR BĪBĪ PARĪ'S TOMB

About 50 yards west of Bībī Parī's tomb is a small three-domed mosque (pl. XXII) which is said to have been built by prince Moḥammad A'zam in A.D. 1678, when he began the construction of the surrounding Lālbāgh fort. The mosque is set at the back of a low podium, and is of oblong plan with octagonal domed corner-turrets. On the main facade the three openings, of which the central is the largest, have four-centred heads and are inset below high multi-cusped arches with network half-domes. The walls are panelled

and are surrounded by a battlemented cresting. The domes spring from octagonal battlemented drums, and the two smaller ones are slightly bulbous and are fluted, with basal leaf pattern. Internally, the three bays are of equal size, but the diameter of the lateral domes is reduced by the intervention of half-domes on pendentives, above which the actual dome springs on a further series of pendentives. A variant of this method of reducing the size of lateral domes will be observed at Khān Mohammad Mirdha's mosque (see below). Constructionally these devices are of interest, but they produce an excessive number of odd-shaped spaces which scarcely harmonize into an easy integral design and tend to overstress the structural problems.

THE MOSQUE AND TOMB OF HĀJĪ KHWĀJA SHĀHBĀZ

About half a mile north of the old city are the small mosque and tomb of plastered brickwork built, as inscriptions record, in A.D. 1679 by Hājī Khwāja Shāhbāz, a merchant prince of Dacca during the viceroyalty of prince Mohammad A'zam. The mosque has octagonal corner-turrets and intermediate pilaster-turrets and the usual three-arched openings on the main facade, the central opening larger than the others and set in a slightly projecting bay. The walls are panelled, and the panels in some cases include the flat-arched recess characteristic of this period. Internally, the three square bays are divided by two multi-cusped and four-centred arches, and are roofed by domes carried on squinches. There are three mihrābs with stilted four-centred heads enriched by spear-head cusping; the central mihrāb also has floreate spandrels and is flanked by tapering octagonal pilasters.

The adjacent tomb is square on plan, with domed and panelled octagonal turrets at the corners and a four-centred doorway in each side, those on the north, east and west sides set in slightly projecting bays. The entrances stood within higher multi-cusped arches with half-domes; but that on the northern side has been rebuilt. The southern entrance is flanked by wall-panels with multi-cusped niches within a sunk panel with a convex Bengali top, and opened into a gabled chamber outside the main plan. The battlemented cresting normal at this period is carried round the building and the turrets, and is repeated internally round the base of the dome above a band of arabesque pattern. The low dome is carried on squinches; the walls are panelled. The tomb is of no special distinction but, like the mosque, is representative of the average Bengali style of the time of Aurangzēb.

KHĀN MOHAMMAD MIRDHA'S MOSQUE

To the north-west of the Lālbāgh fort is a brick mosque built in A.D. 1706 by Khān Mohammad Mirdha, an officer of the government, on the order of Qāzī 'Ibādullah, the head *qāzī*, or magistrate of the city. It stands on a vaulted platform 16½ feet high, approached by 25 steps, and the same platform accommodates a *hujra*, an open arcaded hall, with a side room on both flanks. The arches of the *hujra* are multi-cusped, and above them is a *chajja*, or pent.

The mosque is panelled and has tall octagonal minarets with fluted domes at the main corners, and lesser minaret-pilasters emphasize the principal features of the design. A battlement-cresting runs round the building. Of the three multi-cusped openings on the main facade, the central is larger than the others, and the dome above it is of proportionate size. The domes resemble those of the mosque near Bībī Parī's tomb (above), springing from octagonal drums with battlement-crestings. Internally, the side domes are reduced in size by being carried on half-vaults with intermediate pendentives (see

above). There are three mihrābs under multi-cusped arches. In brief, the building incorporates, without special distinction, most of the tricks characteristic of the sub-Moghul architecture of East Bengal in the latter part of the seventeenth century.

THE SATGUMBAD MOSQUE NEAR DACCA

Near the village of Jafarābād, about 2 miles north-west of the Municipal limit of Dacca, stands a mosque which well illustrates the development of the provincial Moghul style in the latter part of the seventeenth or beginning of the eighteenth century. It is said, though without substantial authority, to have been built by Shaista Khān, who became Governor of Bengal in A.D. 1663 and finally relinquished office in A.D. 1689.

The mosque stands on a revetted platform at the edge of a low plateau which rises to a height of 15 feet above the adjacent flood-plain. It is an oblong structure 58 by 27 feet externally with hollow octagonal towers 12 feet wide instead of the usual minars at the four corners. These towers are of two storeys divided and surmounted by pents, or *chhājjas*, and are crowned by domes with lotus finials. The main façade has three entrances with four-centred arches, the middle entrance slightly larger than the others, all under higher arches with angular half-domes. The central high arch is multi-cusped, whilst the flanking high arches have cusped ornament applied to their outer faces. The central opening is set in a slightly projecting bay bordered by circular ornamental minars, and the whole facade is panelled with niches. It is topped by a battlemented cresting above a band of blue enamel, of which tiny fragments remain, and a similar cresting caps the two stages of the corner-towers. The three main domes which, with the four domes over the towers, give the name ("seven domed") to the building, have a basal course of curved petals or merlons and terminate in lotus finials. The central dome is larger than its fellows.

Internally, the domes are carried on pendentives and, as externally, have a basal course of "petals." The arches of the three mihrābs are ornamented with applied cuspings.

IDRĀKPŪR FORT

At Idrākpūr, a locality of the town of Munshiganj, 15 miles south-east of Dacca, are the half-buried remains of a brick fort built in A.D. 1660 by Mīr Jumla, Moghul governor of Bengal, as an outpost to Dacca against Mugh and Portuguese pirates. The fort is an oblong enclosure, some 270 by 240 feet, with a small featureless gate in the northern side and a circular bastion at each corner. The bastions are solid to rampart-level, above which they are carried up as parapets liberally pierced for musketry. But the special feature of the fort is a huge solid platform or drum, circular, with a diameter of 108 feet and a height of upwards of 30 feet, approached by steps across the eastern wall of the main enclosure and itself situated in an annexe, 130 feet wide, with a small bastion at the north-east corner. A narrow staircase admits to the annexe from the summit of the platform towards the south. Beside the foot of the main staircase to the platform is a small domed store-chamber.

The great platform was evidently designed to mount cannon of considerable calibre, and to serve in fact as a sort of Martello tower. It may be of Portuguese inspiration; Portuguese adventurers are known to have been in the Moghul service at this time (p. 106).

Two other small outposts of this kind, with similar artillery platforms, were built about the same period for river-control in the Dacca district. One of these, much overgrown, may be seen at Khizrpūr or Ḥājiganj, two miles north of Narayanganj, by the west

bank of the Lakhyā river. It is a hexagonal enclosure with circular corner-bastions similarly pierced for musketry, a simple main entrance approached by steps on the north and a postern on the south, and a large square gun-platform towards the river. The third of the series is on the east bank of the Lakhyā a mile below Narāyanganj and is called the fort of Sonākandā. This has a similar gun-platform, loopholes for musketry, and main and postern entrances.

The three forts form an interesting group of seventeenth-century coastguard-works and deserve detailed publication.

PAGLA BRIDGE

About 5 miles south-east of Dacca beside the Narayanganj road, can be seen the remains of a brick bridge which spanned a feeder of the Buri Ganga river close to its junction with the latter. It is said to have been built by Mīr Jumla, viceroy of Bengal in A.D. 1659-63, and is consistent with the style of that period. It is of plastered brickwork, and originally comprised three open four-centred arches flanked at each end by a smaller closed arch, above which the road climbed in a steep camber. There are rounded cutwaters on both sides, capped by turret-like refuges; and on each side at both ends are octagonal towers with arched openings below *chajjas* or pents, above which are flat fluted domes on cylindrical drums. The building is now encumbered by modern structures and is at best a romantic ruin, but in its prime it must have been an effective and attractive piece of engineering.

B. OTHER DISTRICTS

In the Bogra district, a little distance west of the tomb of Banda Saheb at Sherpur Murcha (p. 121), is a mosque known locally as the Tolar Masjid, built, according to an inscription formerly over the central entrance, by a certain Mua'zzam Khān in A.D. 1632. It retains elements of the pre-Moghul style in its octagonal corner-turrets (now incomplete) and its convex Bengali cornice. It is of three bays with corresponding entrances, domes and mihrābs; but the central entrance as well as the central mihrāb is here emphasized by flanking pilaster-minars which, though common in Firuzian mosques at Delhi, now occur for the first time in East Pakistan. They were later to appear regularly in the Moghul mosques at Dacca and elsewhere. The building thus, save in respect of date, belongs stylistically to our Phase II.

So also does another small mosque in the vicinity, close to the village of Khōndkār Ṭolā, to the south-west of the Kherua Masjid (p. 121). This mosque, known as the Bībī Masjid, was likewise erected during the reign of Shāhjahān (second quarter of the seventeenth century), but its building-inscription is now missing. It is only 15 feet square internally, and has a single arched entrance in each of the east, north and south sides, framed within a rectangular panel. At the four corners are the remains of octagonal turrets, between which the cornice shows a pronounced convex Bengali curve on all elevations. The roof is a single dome carried on corbelled brick pendentives of the medieval Bengali type. In the west wall are no fewer than three mihrābs. As a whole, the building is a pre-Moghul building long after its proper time.

In the Mymensingh district, at Agrasindur, is yet another seventeenth-century mosque with pre-Moghul traits. It is oblong on plan, with octagonal corner-turrets, a single squat dome, and three squat arched entrances in the eastern side. The cornice has a pronounced Bengali convexity, but the walls project above it to a level top which, in developed Moghul work, was to bear a battlemented cresting. The exterior has elaborate terracotta ornamentation.

In the same village is another mosque, known as the Mosque of Shāh Mohammad, which in its external decoration recalls the Dacca mosques. It is oblong on plan, with octagonal corner-turrets crowned by pavilions with flat fluted domes. Externally the walls have panels with arches in rectangular frames. The main facade has three arched openings with " Shāh-jahāni " cuspings, the central opening flanked by octagonal pilaster-minars carrying pinnacles (*guldastas*). The walls have a battlemented cresting, and a similar cresting girdles the drum of the single dome. Stylistically, the mosque may be ascribed to the end of the seventeenth or beginning of the eighteenth century.

To the same general date may be ascribed the so-called " Aurangzēb's Mosque " at Masjidpara, in the same district. It is a simple building, square on plan, with octagonal corner-turrets crowned by pavilions, and is roofed by a single dome, the cylindrical drum of which has a battlemented cresting. A similar horizontal-cresting caps the walls, but under it the panelled decoration ends beneath a convex upper border which retains a memory of the curved Bengali cornice. There is a single small arched opening in the east, north and south sides.

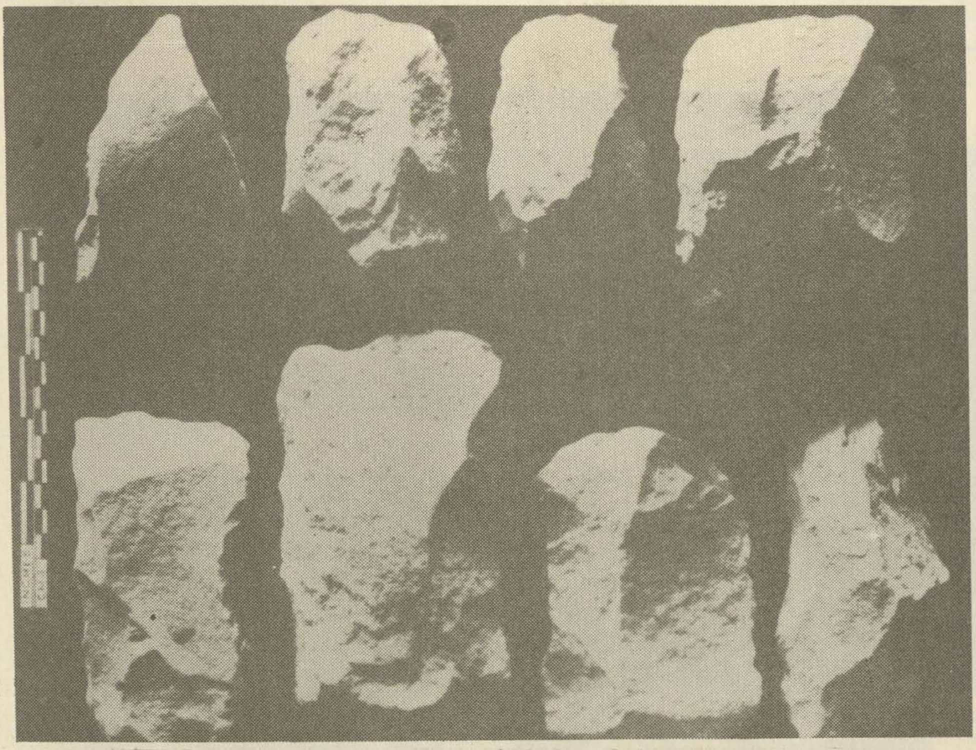
Lastly, at Shujaganj, immediately west of the river Gomatī in the heart of Comilla, is a mosque which, in spite of modern additions, is still essentially a Moghul building of the third quarter of the seventeenth century. It is recorded to have been erected by one Govind Mānikya, a rāja of Tripura state, in memory of his friendship with prince Shāh Shuja', Aurangzēb's rival brother, who fled to this part in A.D. 1659 after his defeat by Aurangzēb's general Mīr Jumla.

The original building was oblong, some 55 feet by 20 feet externally, with octagonal turrets at the four corners and, on the main façade, three four-centred arches—the central larger than the others and set in a projecting bay flanked by pilaster-minarets. The wall-face is extensively panelled under a horizontal moulded cornice below a battlemented parapet. There are three domes, the central larger than the others, with battlemented basal string-courses both externally and internally and lotus- and *kalasi*-finials. They are carried on pendentives. The mihrāb is flanked on each side by a wall-arch or subsidiary mihrāb.

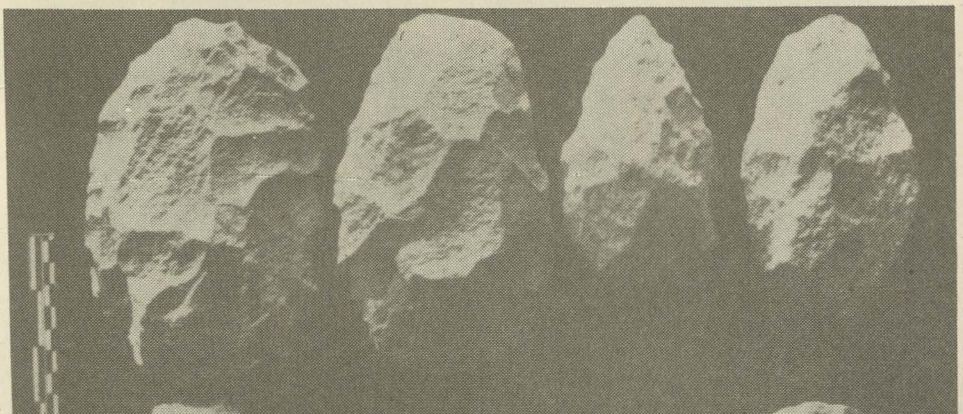
The mosque is a simple but characteristic example of the provincial Moghul style of the period.

23. HINDU REMAINS OF THE MUSLIM PERIOD

AFTER the Muslim invasion of *c.* A.D. 1200, Hinduism survived here and there in East Bengal not only beyond the reach of Islam but even in its midst. The strong personality of the country and its capacity to reconcile new elements with its traditional culture have more than once been emphasized in the preceding pages; and there is no better illustration of this than the existence today of temples of the sixteenth to eighteenth centuries in Muslim-majority districts such as Pabna, Faridpur and Bakerganj. These temples show the influence of Muslim building-design, just as, on the other side of the sub-continent, the temples of Goa show the influence of Christian (Portuguese) building-design. But they show also the overwhelming influence of the local genius, and architecturally they may be described as predominantly neither Muslim nor Hindu but *Bengali*. They deserve a careful study and full illustration which cannot be accorded to them here, though two or three examples will be cited presently.

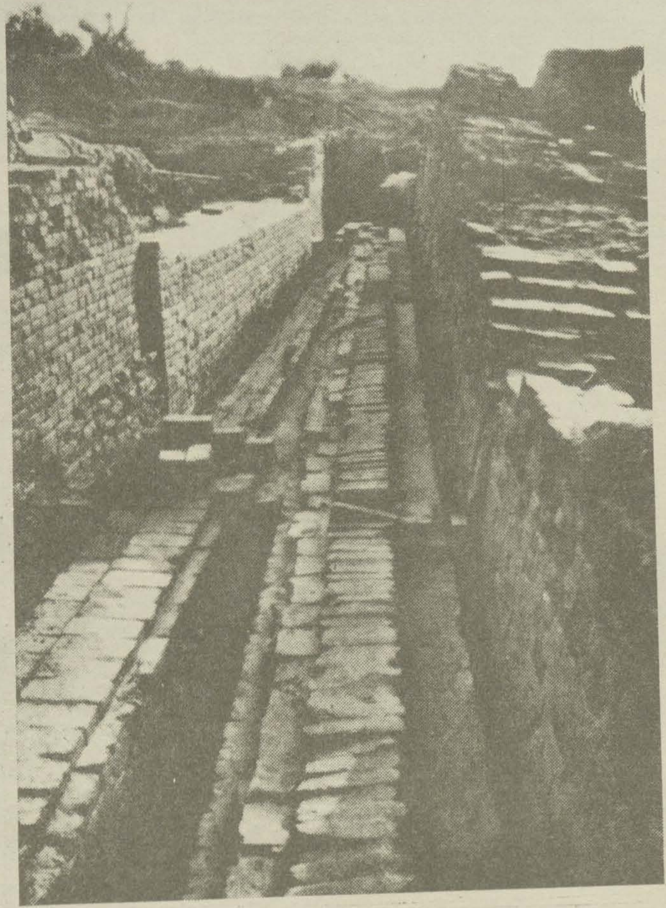


(a) PALAEOLITHIC STONE CHOPPERS, RAWALPINIDI DISTRICT. See p. 15



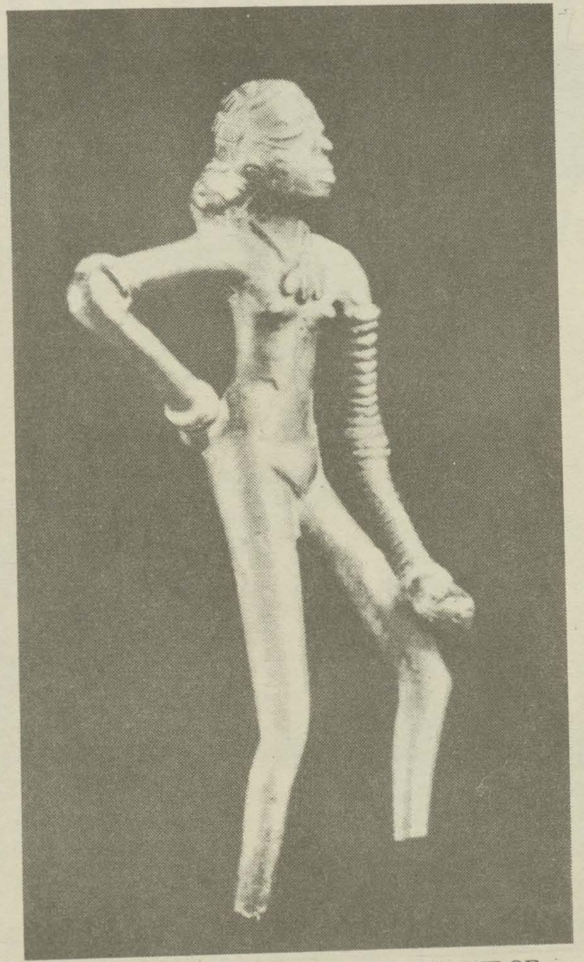
(b) PALAEOLITHIC STONE "HAND-AXES," RAWALPINDI DISTRICT. See p. 16

PLATE III



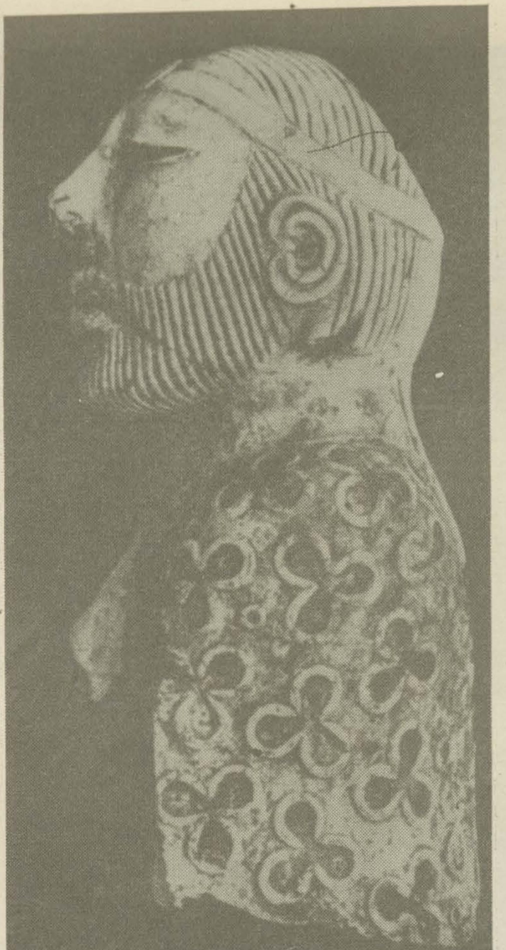
(a) MOHENJO-DARO: LANE WITH DRAINS, DK AREA.

See p. 27



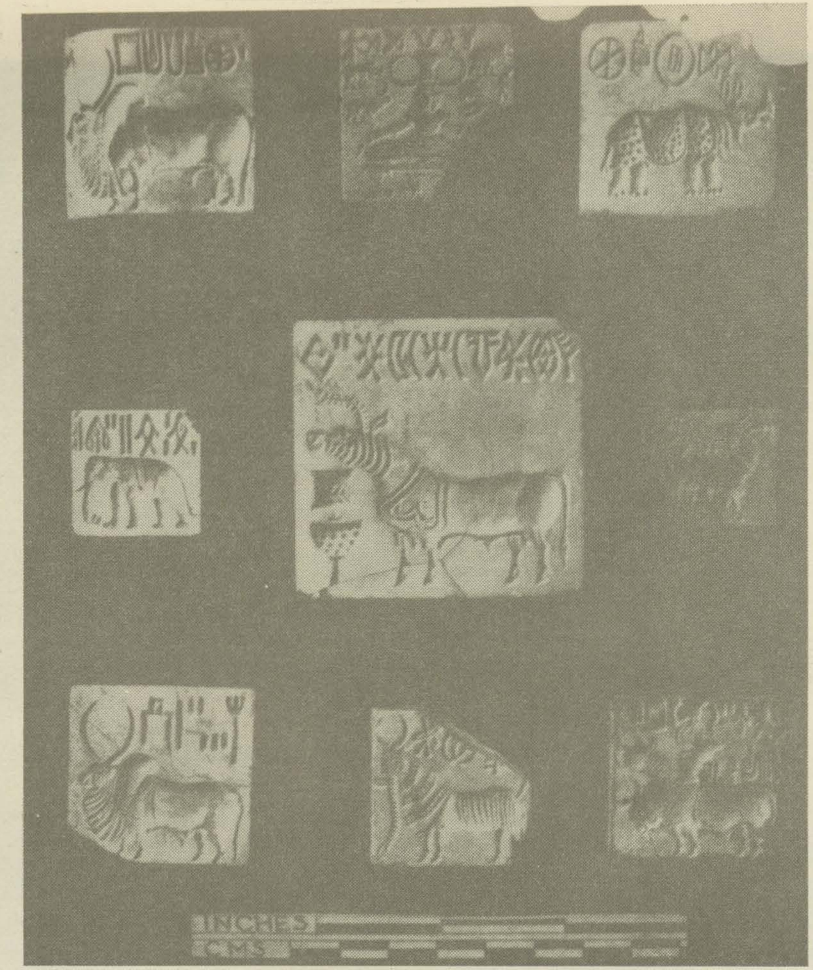
(b) MOHENJO-DARO: BRONZE FIGURINE OF DANCING GIRL

PLATE IV

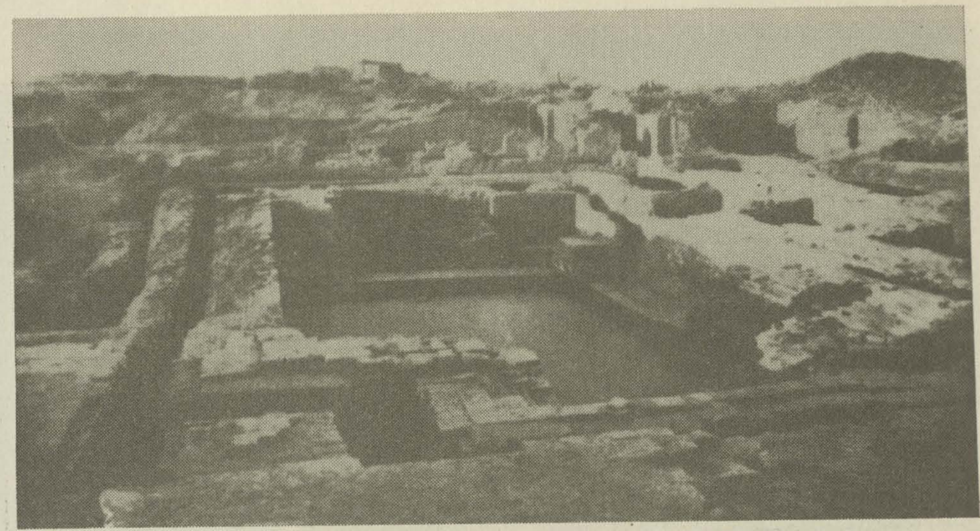


(a) MOHENJO-DARO: STONE BUST OF GOD OR PRIEST (?). *See p. 29*

Height 7 ins.



(b) MOHENJO-DARO: STEATITE SEALS. *See p. 29*



(a) MOHENJO-DARO: THE GREAT BATH ON THE CITADEL. See p. 26

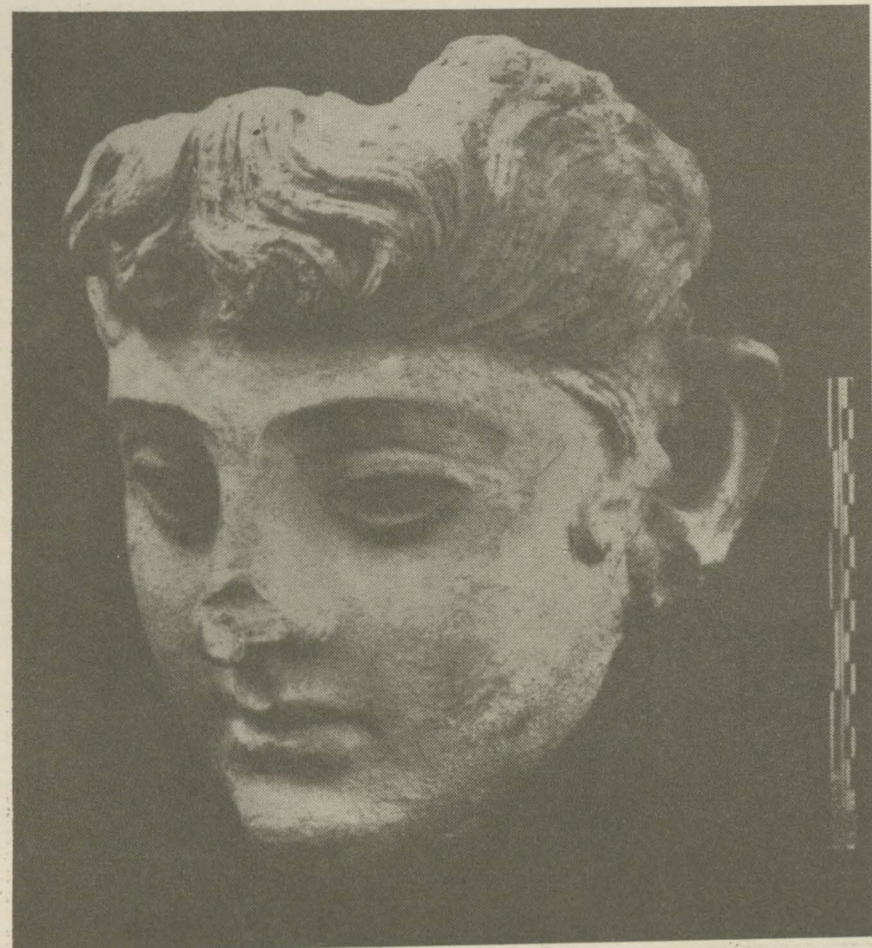


(b) MOHENJO-DARO: THE FINAL MASSACRE. See p. 31



TAXILA (SIRKAP): AIR-VIEW. *See p. 41*
1st century A.D.

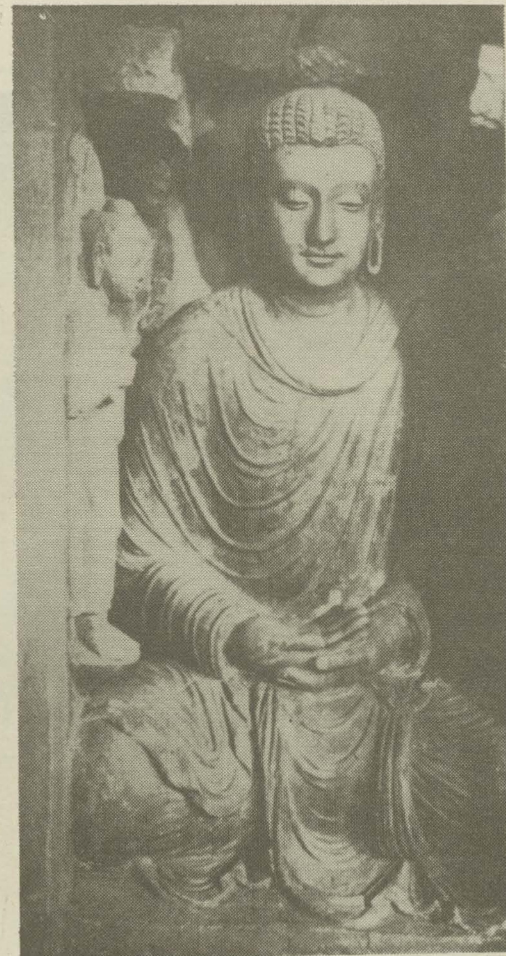
PLATE VII



(a) TAXILA: STUCCO HEAD FROM THE VICINITY OF THE DHARMARĀJIKĀ STŪPA

About the 2nd century A.D.

See pp. 54-55



(b) TAXILA: STUCCO STATUE OF THE BUDDHA IN THE ATTITUDE OF MEDITATION, IN THE JAULIĀN MONASTERY

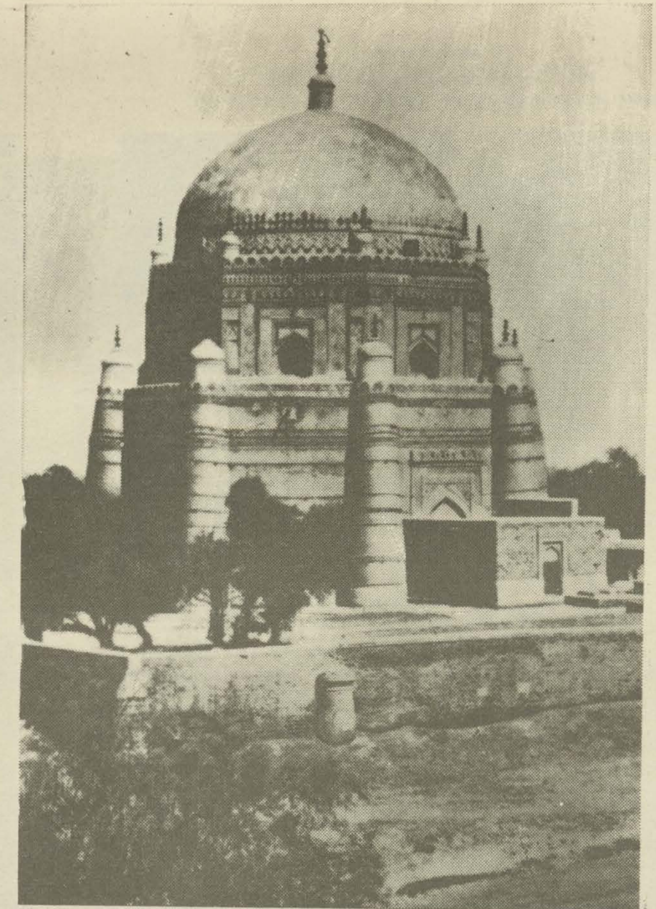
About A.D. 400

PLATE VIII



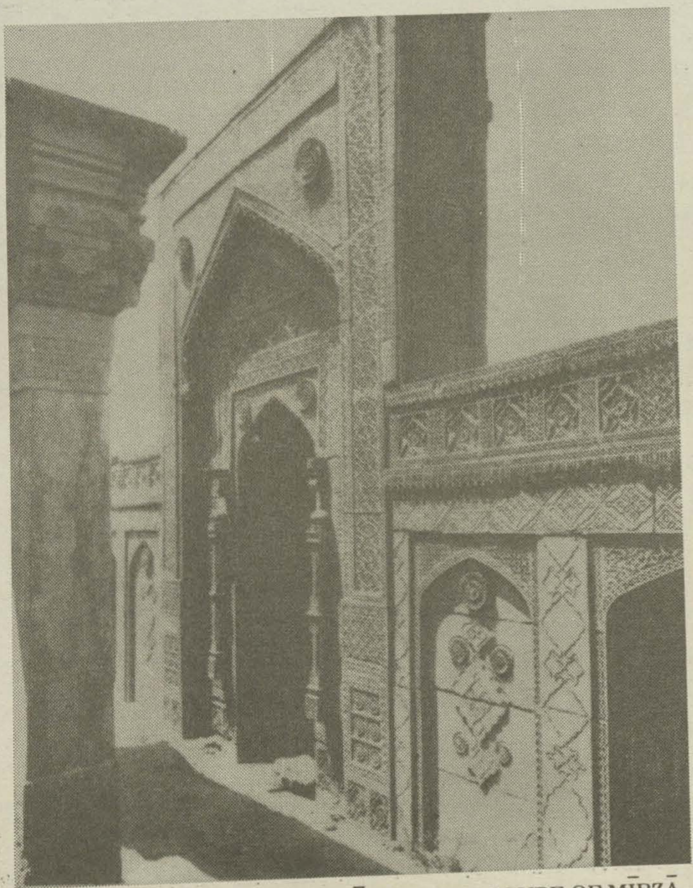
(a) TEMPLE IN THE SOUTHERN KĀFIR KŌT, DERA ISMAIL KHĀN DISTRICT. *See p.* 57

8th-10th century A.D.

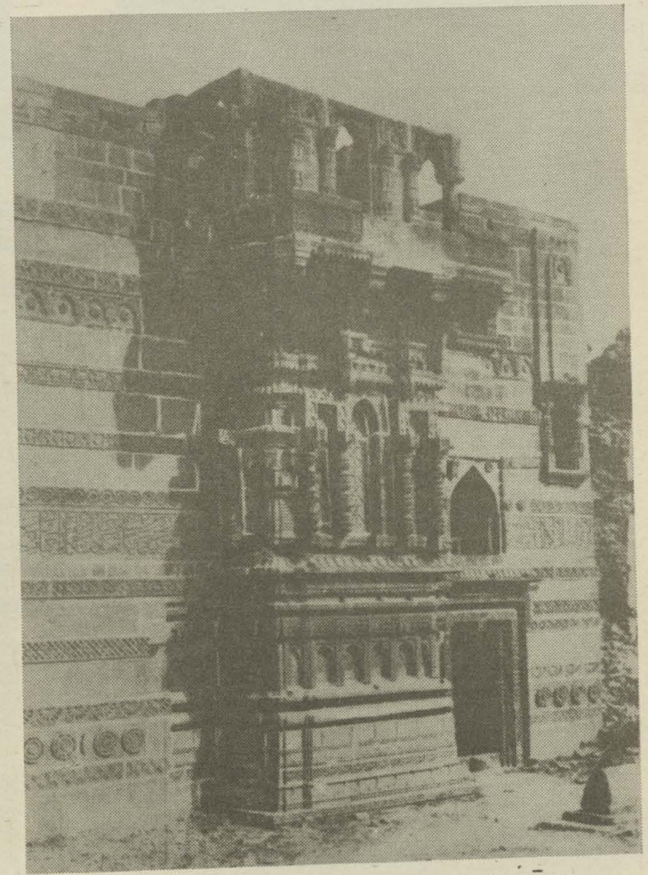


(b) MULTĀN: TOMB OF RUKN-I-‘ALAM. *See p.* 66

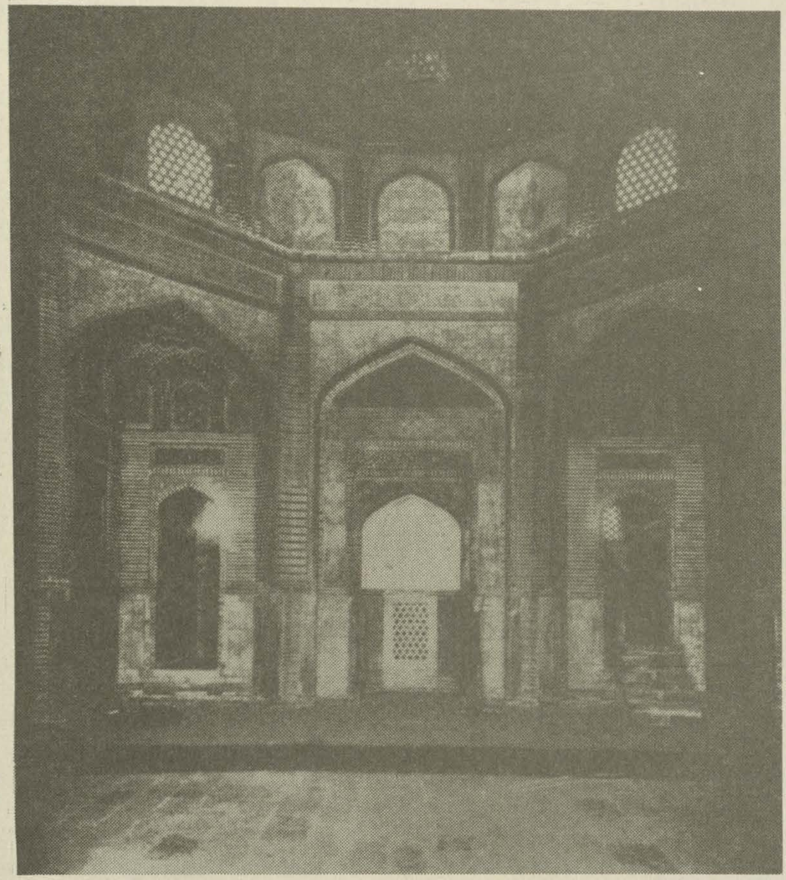
A.D. 1320-4



(a) MAKLĪ HILL, TATTA. MIHRĀB OF ENCLOSURE OF MĪRZĀ 'ISĀ KHĀN'S ZANANAH TOMBS. See p. 69
About A.D. 1640



(b) MAKLĪ HILL, TAṬTA: EXTERIOR OF JĀM NIZĀMU-D-DĪN'S TOMB. See p. 69
About A.D. 1508



(a) TATTA: INTERIOR OF THE JAMI MASJID. *See p.* 69
A.D. 1644

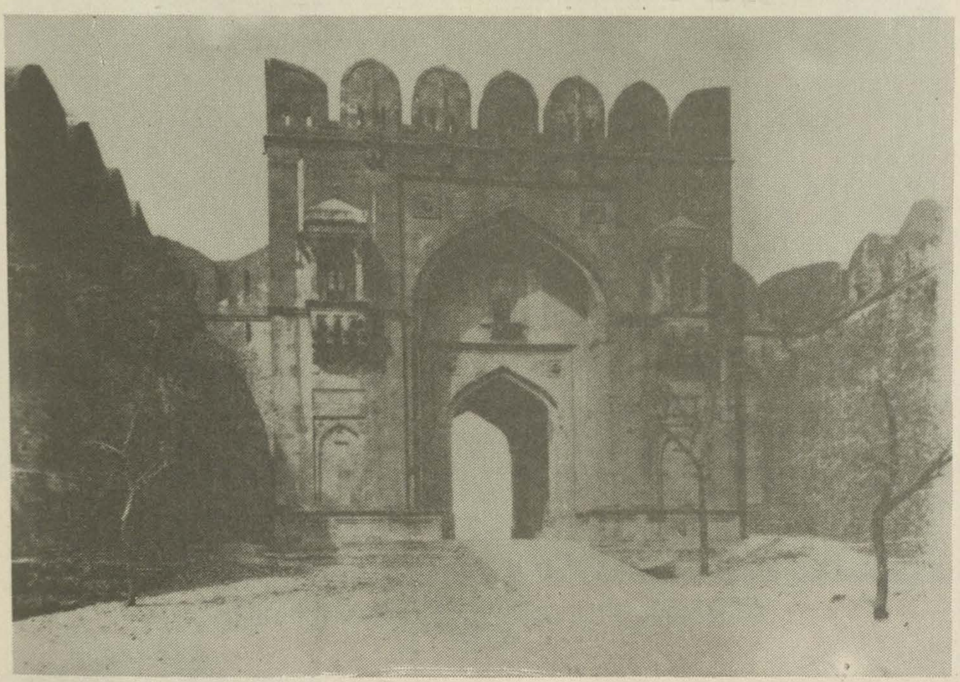
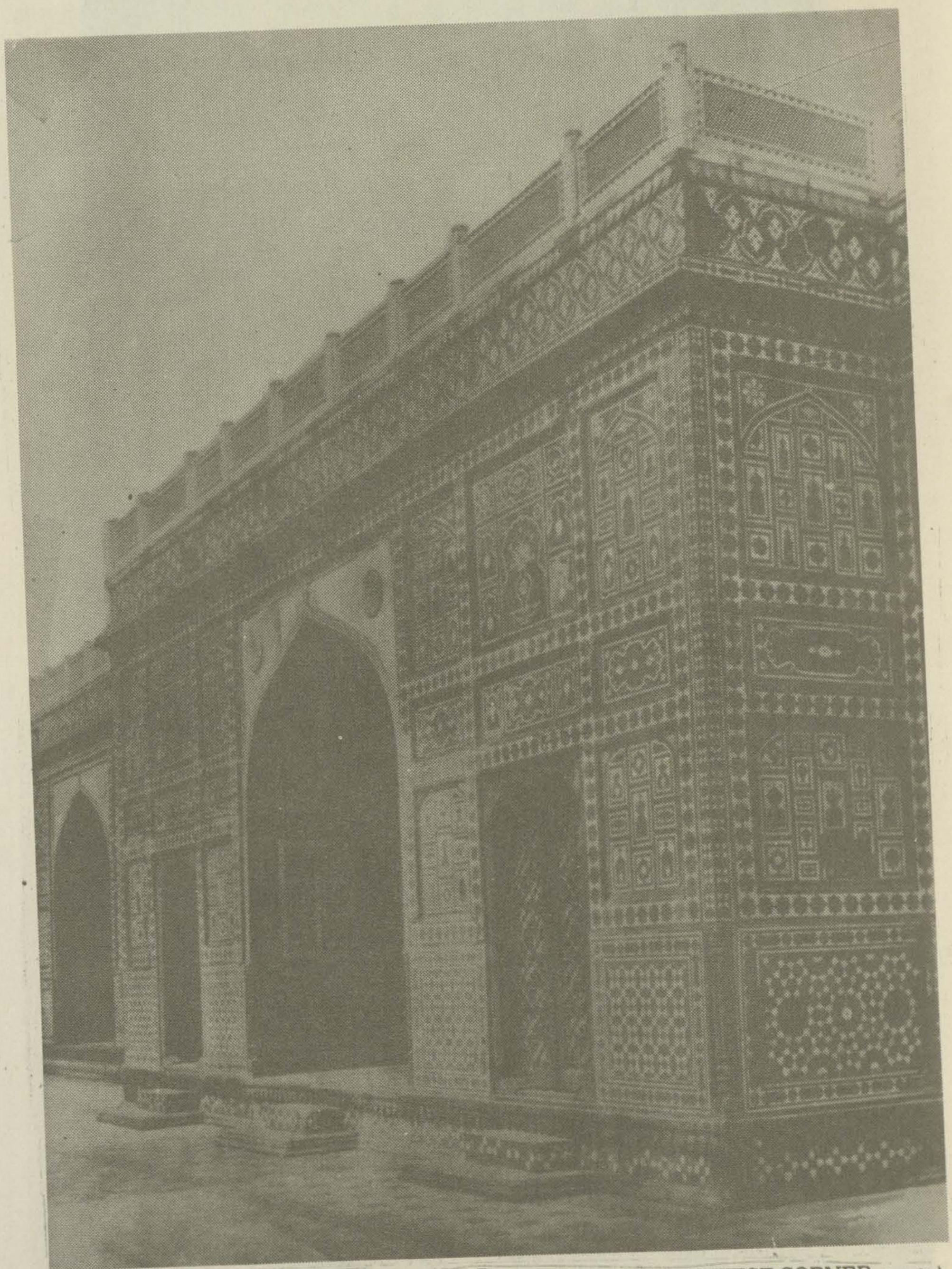
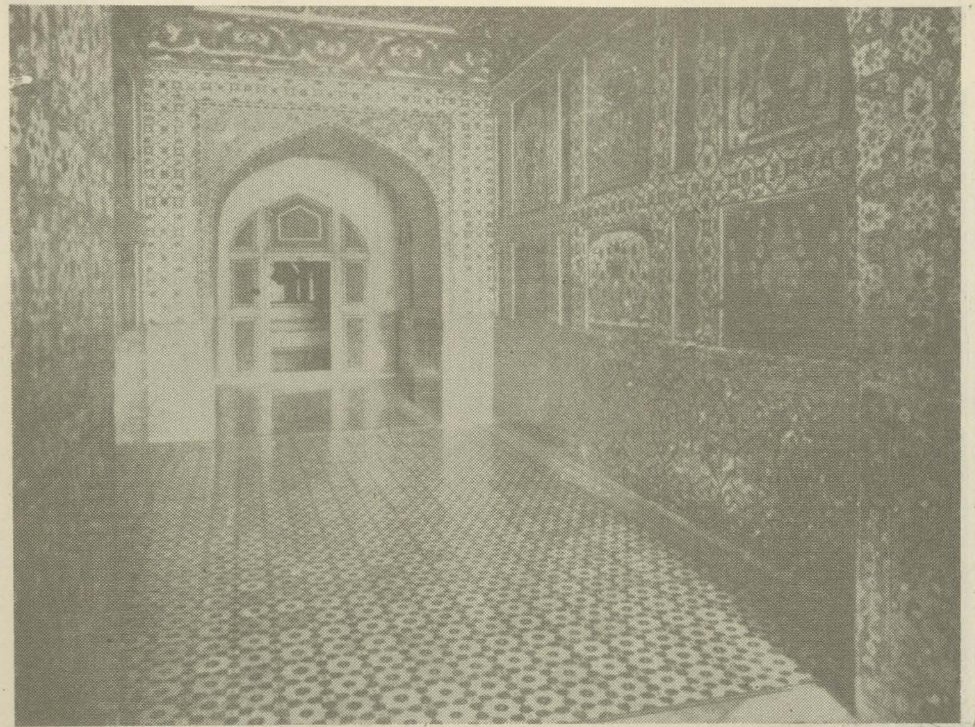


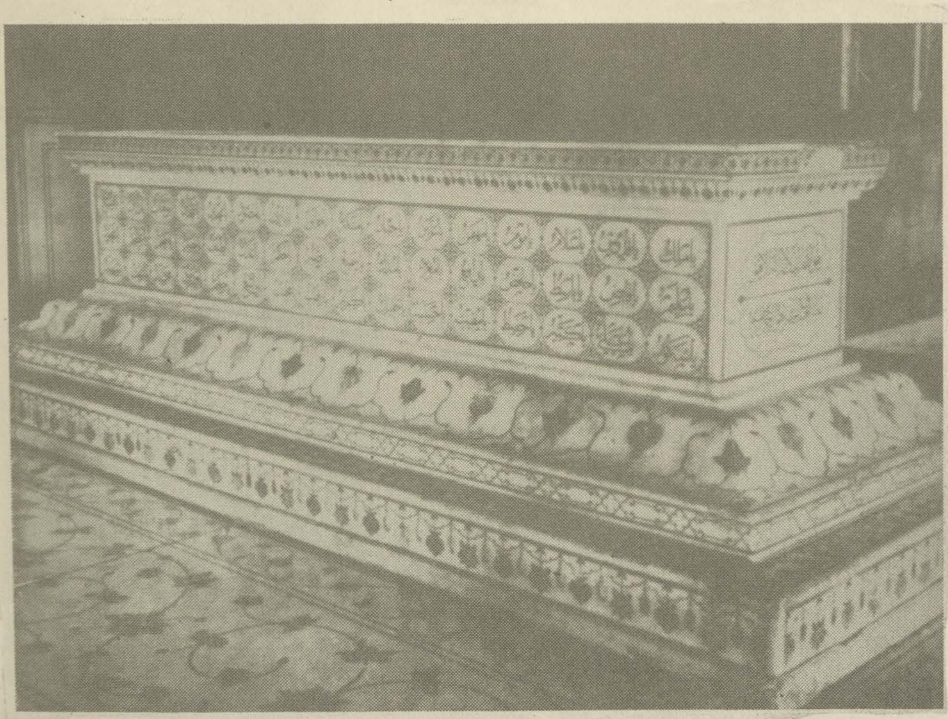
PLATE XI



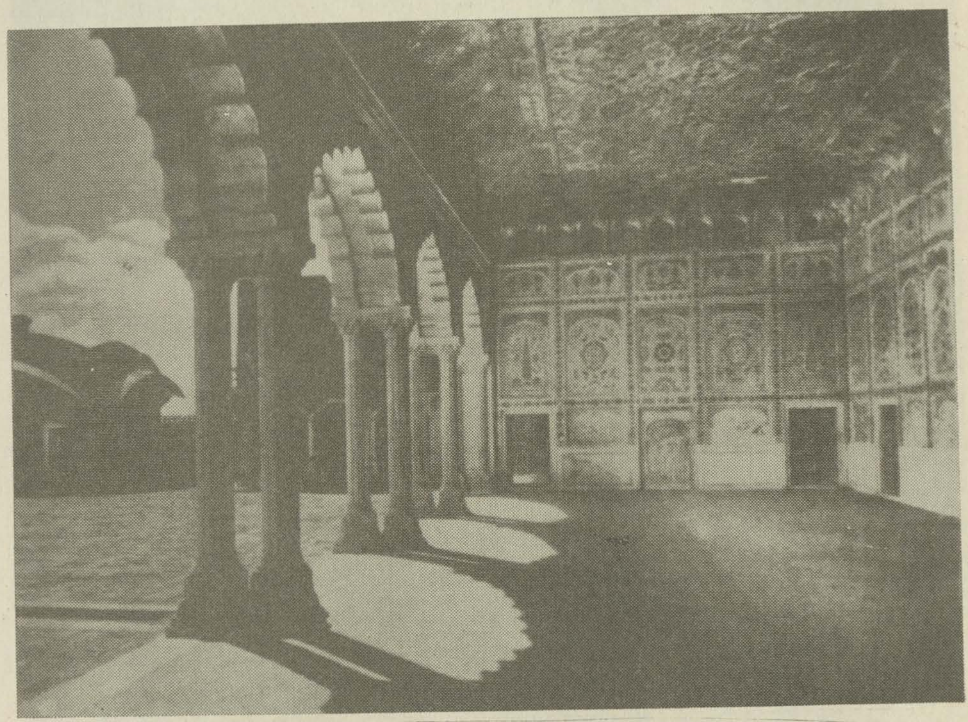
THE EMPEROR JAHĀNGĪR'S TOMB, SHĀHDARA: THE SOUTH-WEST CORNER. See p. 84
A.D. 1527



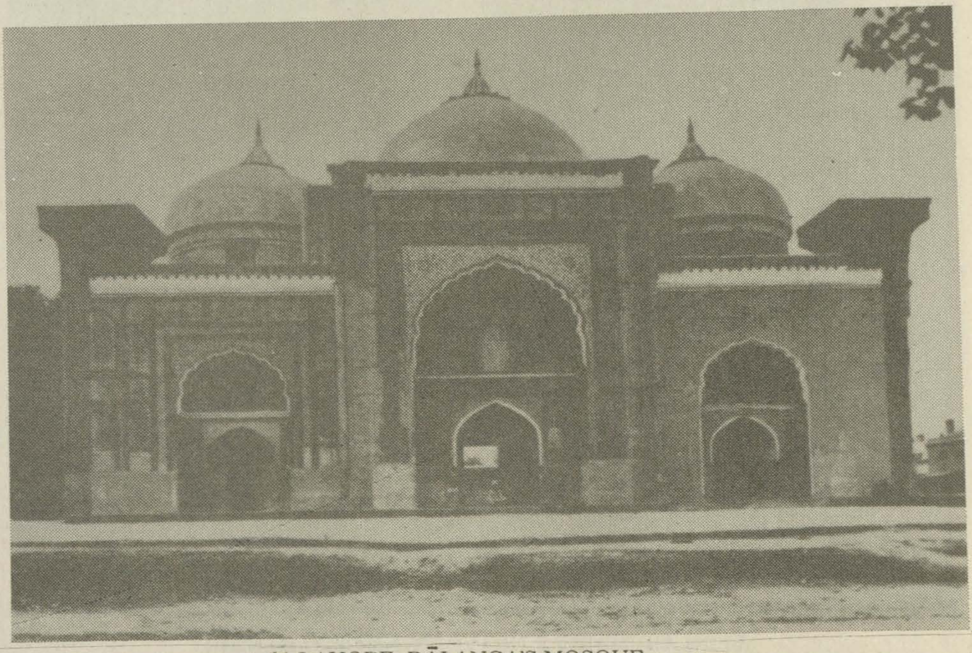
(a) INTERIOR OF JAHĀNGĪR'S TOMB
A.D. 1627 (restored)



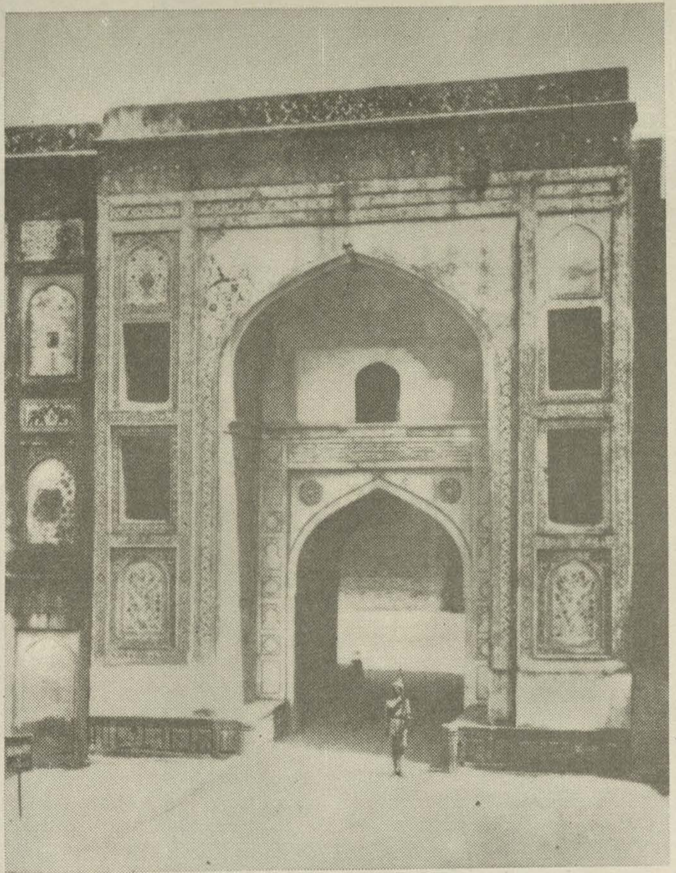
(b) INLAID MARBLE GRAVESTONE OF JĀHANGĪR
A.D. 1627



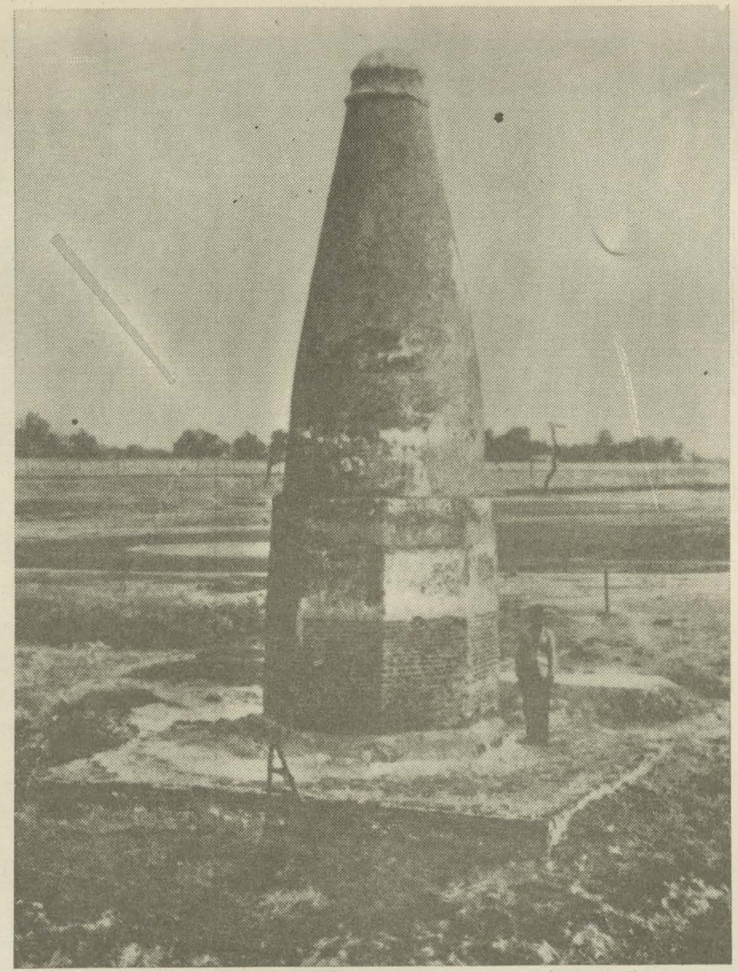
(a) LAHORE FORT: THE SHĪSH MAHAL (HALL OF MIRRORS). See p. 80
About A.D. 1632



(b) LAHORE: DĀI ANGA'S MOSQUE See p. 86
About A.D. 1635



(a) LAHORE FORT: THE HĀTHĪ POL (ELEPHANT GATE). See p. 79
A.D. 1632

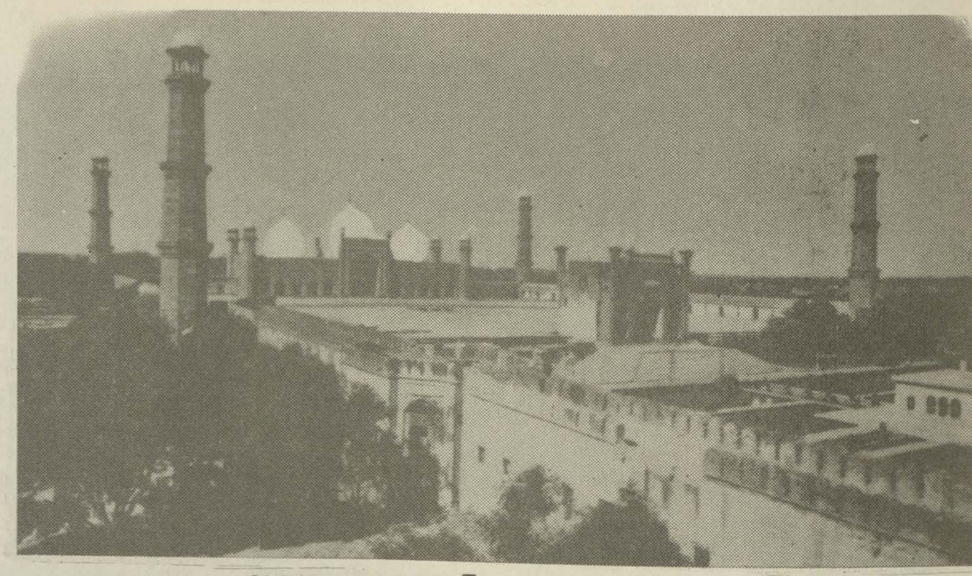


(b) LAHORE: KŌS MINĀR NEAR THE RAILWAY STATION. See p. 93
Early 17th century

PLATE XIV



(a) LAHORE FORT: AURANGZĒB'S GATEWAY. See p. 82
About A.D. 1673



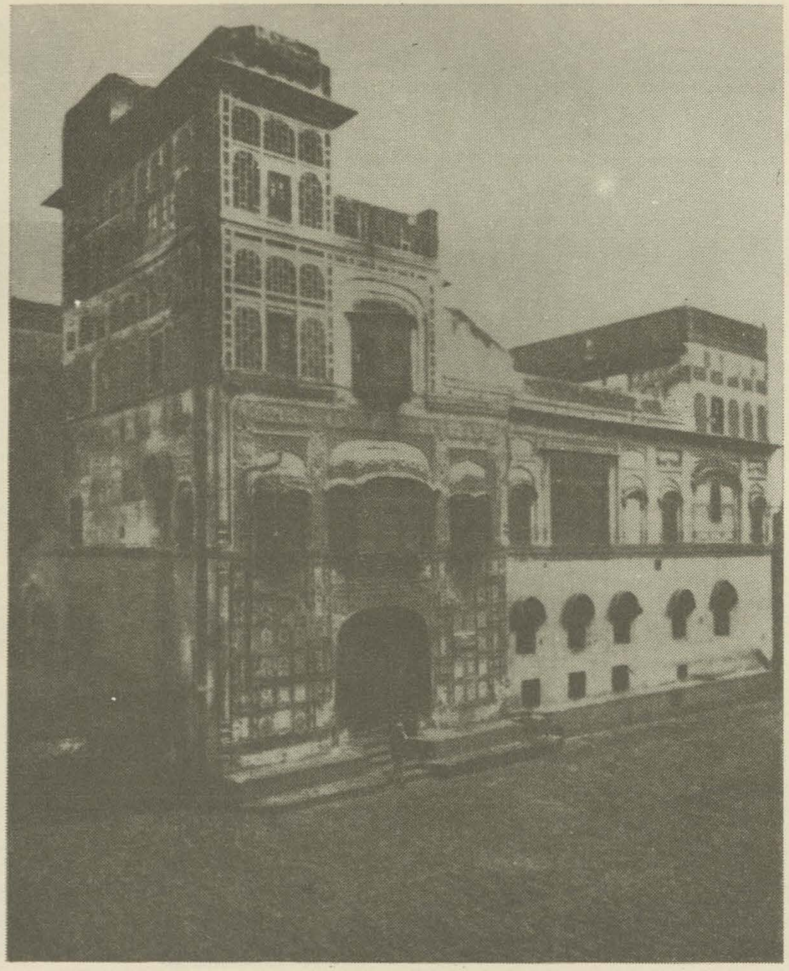
(b) LAHORE: THE BĀDSHĀHĪ MOSQUE. See p. 92
A.D. 1673-4

PLATE XVI



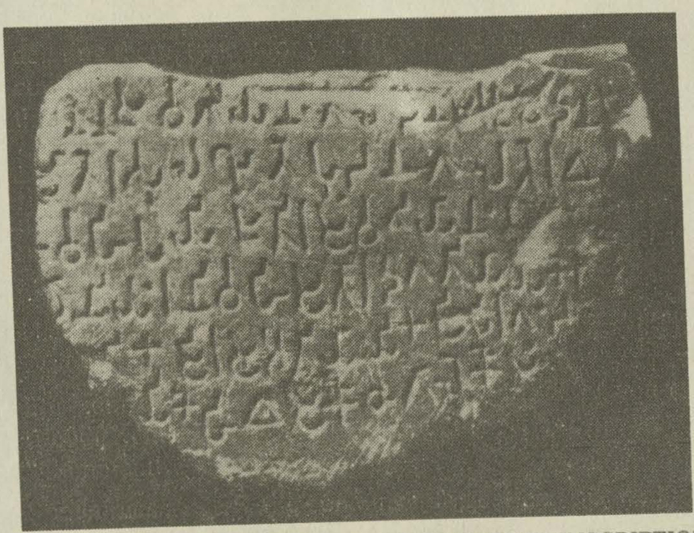
(b) LAHORE : Haveli OF PRINCE NAO NIHAL SINGH. *See p. 77*

About A.D. 1830-40

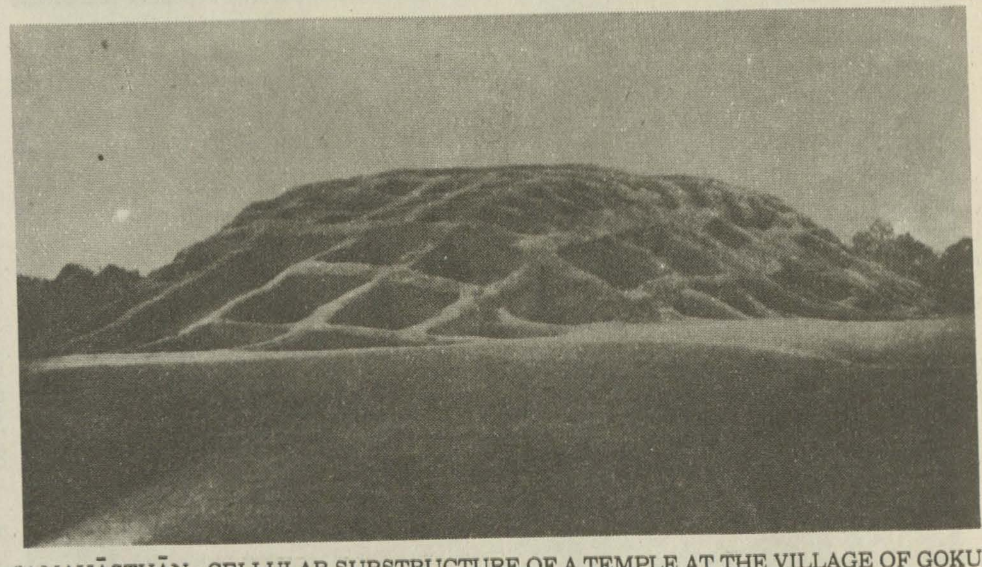


(a) LAHORE: WOODEN DOORWAY FORMERLY IN THE OLD CITY NOW IN THE MUSEUM. *See p. 77*

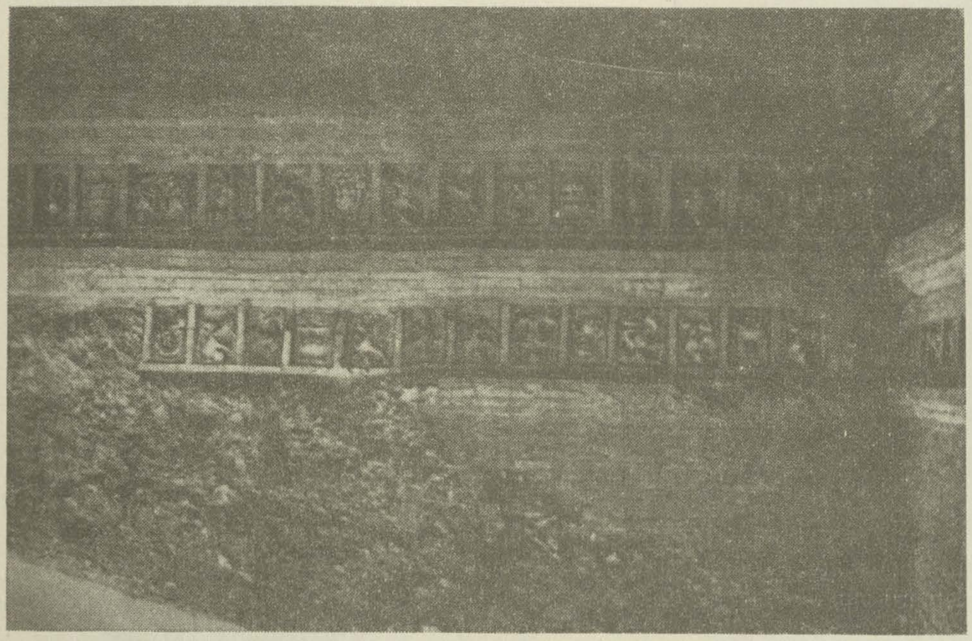
16th-17th century A.D.



(a) MAHĀSTHĀN, EAST BENGAL : FRAGMENTARY INSCRIPTION
Actual Size Probably 3rd century B.C.
See P. 96



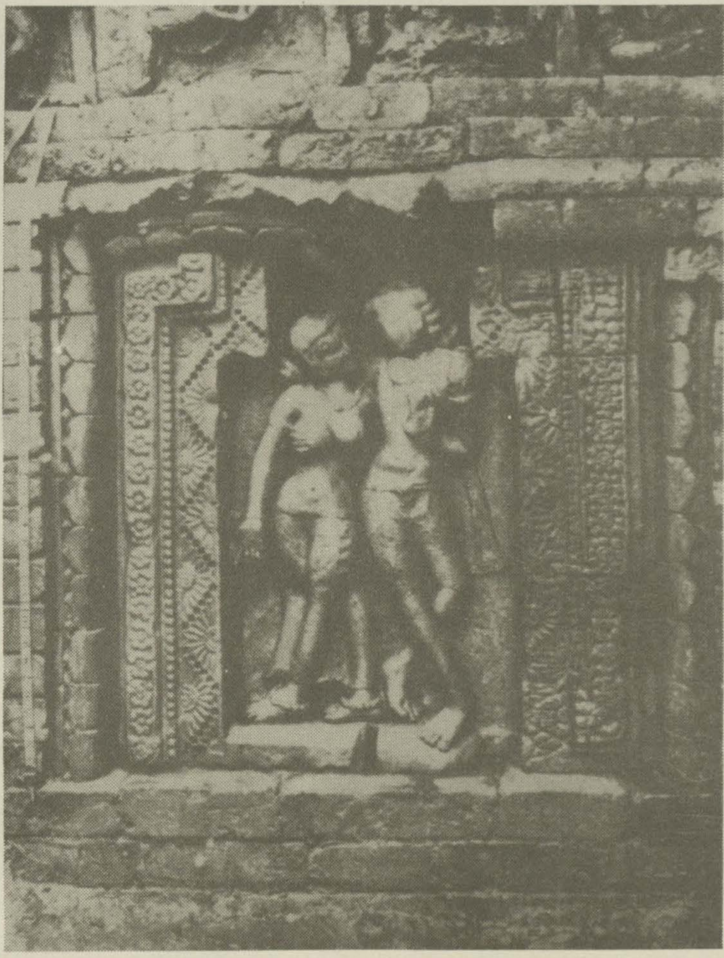
(b) MAHĀSTHĀN : CELLULAR SUBSTRUCTURE OF A TEMPLE AT THE VILLAGE OF GOKUL
Possibly 7th century A.D.
See p. 102



(a) PAHARPUR, EAST BENGAL: TERRACOTTA PANELS ON BUDDHIST STŪPA
About A.D. 800



PLATE XIX



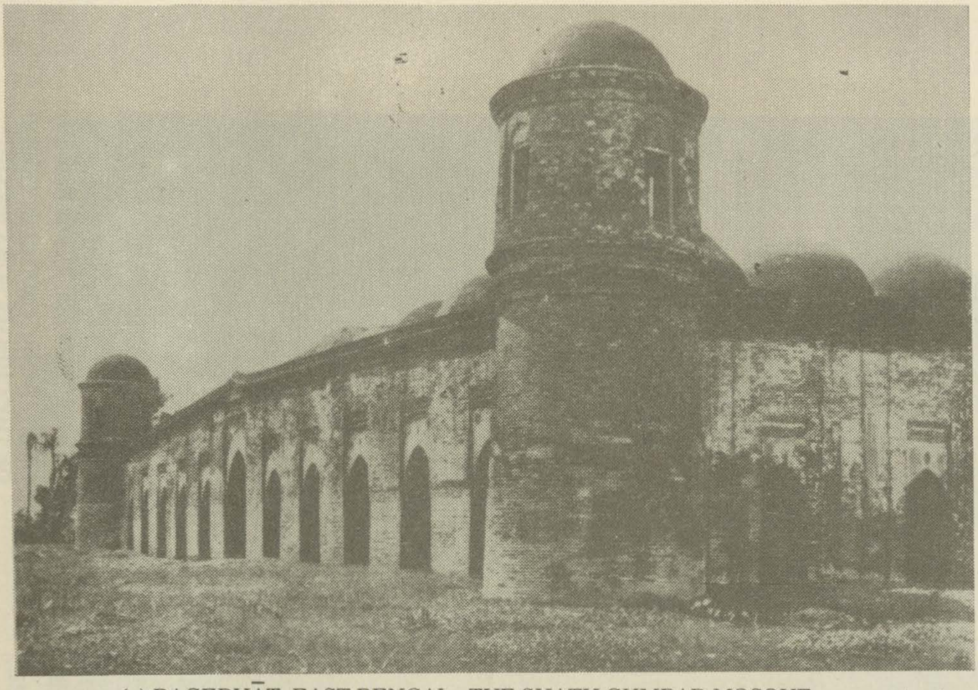
(a) THE PAHARPUR STŪPA: STONE RELIEF REPRESENTING RĀDHĀ AND KRISHNA. *See p.* 100

About A.D. 800 or a little earlier

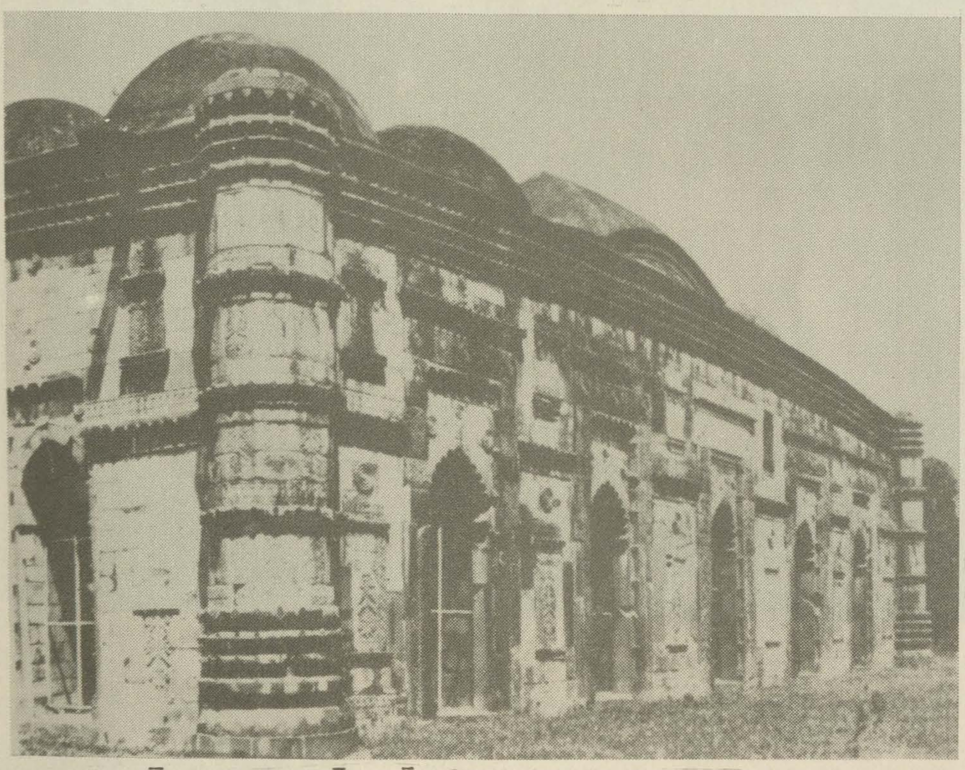


(b) THE PAHARPUR STŪPA: STONE RELIEF *See p.* 100

About A.D. 800

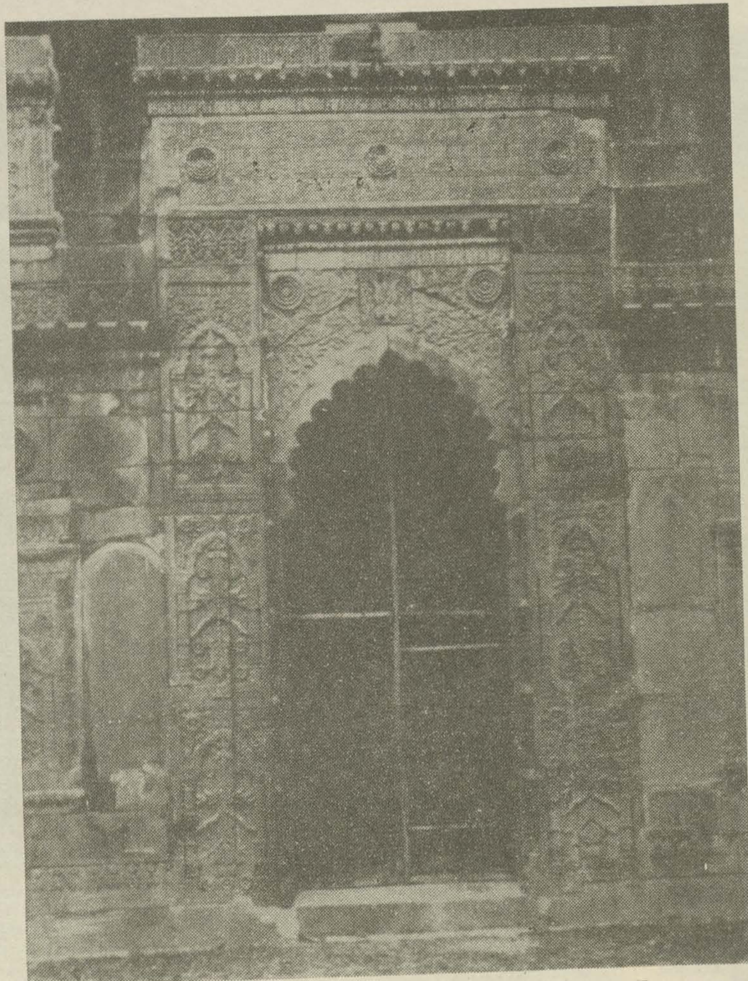


(a) BAGERHĀT, EAST BENGAL : THE SHATH GUMBAD MOSQUE. *See p.* 114
About A.D. 1459



(b) GAŪR : THE CHHOTĀ SONĀ MASJID (SMALL GOLDEN MOSQUE) *See p.* 117
About A.D. 1500

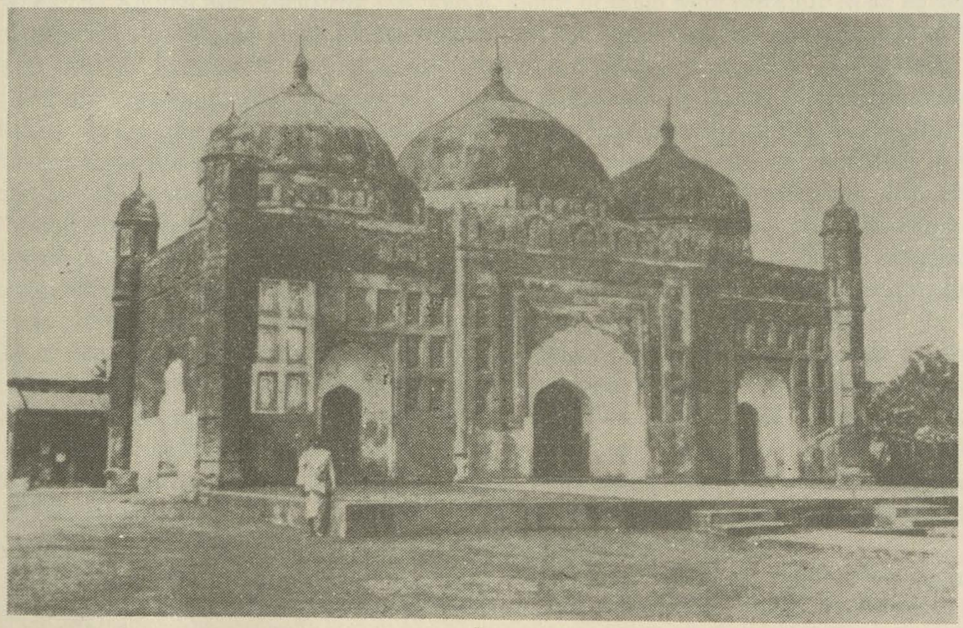
PLATE XXI



(a) GAŪR : CENTRAL ENTRANCE OF THE CHHOTĀ SONĀ MASJID
About A.D. 1500



(b) GAŪR : PANEL ON THE EXTERIOR OF THE CHHOTĀ SONĀ MASJID
About A.D. 1500



DACCA: MOSQUE IN THE LĀLBĀGH See p. 124
A.D. 1678

In the north and north-east of the province there is an even wider field for study in the non-Muslim context. East of the river Karatoya, in Rangpur and the neighbouring districts as far as Kamrup, is a region which may, culturally, be regarded as a westward promontory of Assam rather than as an integral part of Bengal. It was ruled, in and before Muslim times, by a number of local kings who owed their survival partly to their remoteness and partly to a capacity for joint action in a crisis. In the fifteenth century it was dominated by the Tibeto-Burman Khen dynasty, and included a considerable mongoloid element in its make-up. This dynasty served as a sort of buffer between the Ahoms of Assam and Muslim Bengal, and may have been responsible for the construction of some of a number of unclassified fortifications in the region; others of them may be of earlier origin, others again may be of even later date when the Ahoms were thrusting westwards. Some of them were certainly in an effective condition when the Moghul army of Islām Khān invaded the country in 1613, or that of Mīr Jumla in 1661-2. At present, no precise information is available in regard to any of them. A hasty preliminary examination of some of them was undertaken by the Archaeological Survey of India in 1924, and a summary account appears in the Survey's Annual Report for 1924-25. The fortifications are situated at (former) river-crossings. One of them, at Kantaduar in the Gaibandha sub-division of the Rangpur district, has " three different ramparts with brick cores which are still formidable in size and height and are separated one from the other by four broad moats, most of which contain water even in the driest season. . . . A distinctive characteristic of this class of fortifications is the projection of screen-walls, resembling modern barbicans, which project at right angles from the concentric circumvallations. . . . In the interior of the ring of ramparts there is a flat plain which contains several mounds covering the ruins of structures or temples. . . . The core of the present exterior wall shows the existence of burnt brick masonry 7 feet in thickness and at places 15 feet to 16 feet in height. . . . At a distance of nearly a mile from the dried-up moats there is a large mound about 30 feet in height, on which stands a little *dargah* or *idgah* built during the reign of sultān Alaūddīn Shāh of Bengal (A.D. 1489-1526). The mound appears to contain the ruins of an ancient temple destroyed by the Musalmans and converted into a mosque and a *dargah*.

" Due north of Kantaduar is the village of Debipūr. . . . One high and two low mounds in the village still indicate the position of important structures. The village is now inhabited by aboriginals from Chhoṭā Nagpūr and a few Musalmans. The latter informed me that an image of the ten-armed Durga was recovered from the top of the highest mound some years ago. . . . To the north-east of these mounds are several others."

Another of these fortified sites lies on the bank of the river Torsha, a tributary of the Dharala, in the southern part of Cooch Bihar State and, therefore, outside our territory. It is ascribed traditionally to the Khens. A third, of vast size, is the Bhitargarh in the Pakistan portion of Jalpaiguri (now Dinajpur) district. Apart from outworks of unascertained extent, the remains consist of three roughly oblong enclosures, one within the other. The outermost is 3½ miles from north to south and about 2 miles wide, and is surrounded by a ditch and a rampart, or in places two ramparts, apparently of earth. The middle enclosure is 1¾ miles from north to south, and appears to have had a brick curtain-wall. Within it is a further brick-walled enclosure half a mile long, with a large tank impinging upon its north-eastern corner. The only other recorded structural evidences are a few small heaps of bricks; most of the buildings were, doubtless, bamboo and thatch.

Hereabouts, too, we find an example of a different type of fortification: one which travels across country between two natural obstacles, and, since it does not itself enclose an area, is

known to archaeologists as a "linear" work. "Between the Karatoya and the Teesta lies a big rampart with a fosse in front. It has been pierced in several places for the passage of District Board roads, but still exists to the south-west of the modern town of Rangpūr. According to local information, this rampart now forms the boundary between the Parganas of Sadyapushkarini and Batasan of the Rangpūr District. On examination it was found to be a high mud wall a hundred feet in thickness, generally 20 to 40 feet in height above the cultivated fields at the back and 40-60 feet from the bed of the fosse or moat in front of it. The existence of the fosse towards the south and south-east indicates that the wall was built by the people of north-eastern India against aggression from Bengal or the south-west. The fosse or moat is cultivated in many places and does not contain water during the winter, but the top of the rampart is always covered with jungle and, being high land, is not much in demand for cultivation. The Gazetteer wrongly describes this rampart as extending from the Karatoya to the river Brahmaputra. It is well known that before 1787 the Teesta followed a different course and joined the Atral instead of joining the Brahmaputra. The wall belongs to an age when the Teesta did not flow along its present bed. So far as it has been surveyed it seems to have extended from the old bed of river Manas, marked Mara-manas in survey maps, to the Karatoya."

A comparable cross-country fortification, with bastions, has recently been detected between the Brahmaputra and a neighbouring stream west of Sibsagar in Assam, where it is presumably the work of the Ahoms. In a country so seamed with rivers, such a defence has an obvious appropriateness; but linear works do not seem to be at all common in the Indo-Pakistan sub-continent.

We now return to the temples referred to in the opening paragraph of this chapter. These are of two main kinds: (*a*) of tall, spire-like form, generally akin to the North Indian temple-type; and (*b*) imitations of indigenous huts of bamboo and reeds. Only type (*a*) is represented within the time-limit of this book, and three examples will be cited.

(i) JAGANNĀTH TEMPLE AT HANDIAL, PABNA DISTRICT

In the village of Handial, to the north-west of the Chatmohar thana in Pabna district, is a temple which is recorded by inscription to have been repaired at a date equivalent to A.D. 1590. It is square on plan, with a pyramidal spire or *śikhara* topped by a finial. The western facade is richly decorated with carved bricks; the doorway has a two-centred engrailed arch of Muslim pattern, with lions, makharas and floral patterns in the spandrels and a rectangular framework panelled with rosettes and human figures. Inside is a wooden statue of Jagannāth.

(ii) MATH AT KODLA, KHULNA DISTRICT

About 2½ miles from Jatrapur station on the Khulna-Bagerhāt railway is a *math* or commemorative monument built, according to a fragmentary inscription in Bengali lettering of the sixteenth century, by a certain Brahman and dedicated to Taraka or the "saviour," probably Brahmā. It is 10½ feet square on plan, with a convex *śikhara* (now incomplete), and is ribbed horizontally by mouldings which, combined with vertical variations in the surface, pleasantly mitigate the severity of the general lines. The doorways and, on the north face, a door-like niche are of Muslim pattern, with engrailed arches and richly carved terracotta surround.

(iii) DEOL OR TEMPLE AT MATHURAPŪR, FARIDPŪR DISTRICT

This temple is similar to the Kodla *math* but is twelve-sided on plan, with a basal diameter of 12½ feet, and with doorways of Muslim type on the south and west. The convex *śikhara* survives to a height of 70 feet. The whole exterior, save for the doorways, is ribbed horizontally with decorated brick mouldings, between which the friezes bear rural scenes, *kīrtimukhas* (lion-masks), leogryphs, and scenes from the *Mahābhārata* and *Rāmāyana.* The effect is rich in detail, even if the general design is somewhat arid.

RETROSPECT AND PROSPECT

THIS outline of the archaeology of Pakistan has, at best, been a broken one. There are great gaps in our knowledge which it is a task of Pakistan scholars to fill, and the task is one in which Pakistan unhesitatingly invites the co-operation of foreign scholarship. Whatever boundaries may be imposed by economic and social factors, science knows no frontier, and to scientific invaders from all countries the gates of Pakistan are widely open.

The gaps in our knowledge are of two main kinds. First, the major events in our story have been inadequately related to one another. They are episodic. Evidence of significant continuity has often been lacking. The most that can be done at present is to recognize a certain rhythm or at least reiteration in terms of geography. Time and again the arterial route of the Indus has lured traders or invaders from the Arabian sea. Traffickers from Palmyra and Alexandria have come that way to meet the caravans of High Asia. Centuries earlier it may be that occasional ships passed that way from the prehistoric cities of the Indus to the protohistoric cities of Sumer, as later they sailed to the ports of Babylon. Arabs have come that way to win eternal bliss and temporal benefit in Sind and the Punjab. Or again, the passes of Baluchistan and the western Himālayas have age after age borne prehistoric villagers, Turkoman caravans, Āryan, Greek, Afghan, Moghul and Iranian invaders along the few familiar channels which nature has cut between the plateau and the plain. Some of these intruders have lingered in the great valley of the Indus and its tributaries. Others have passed on eastwards into the expanse of North India, to be absorbed ultimately in a greater vastness than human effort could encompass; as considerable rivers—the Helmand, the Tarim, the Balkh—flow sturdily for a while and then vanish through inanition in the illimitable Asiatic landscape. And from time to time the pendulum has swung the other way. Enterprising Mauryas and Guptas from the Ganges valley have thrust westwards towards the Hindu Kush, and a Gangetic faith has pervaded along that path into the midst of Asia. But on the whole these plainsmen have not greatly troubled our Western Pakistan. Not that courage was innately lacking. To underrate the recorded valour of the Hindu defenders of Sind in the eighth century A.D. would be to underrate the achievement of their Arab conquerors. On occasion, well led, the Hindu warrior fought well. Save, however, under the rare stimulus of imperial ambition, he had no great concern with the lands which lay towards the hills and the desert. He suffered no land-hunger in his own fertile plains; his religion was not of the proselytizing sort; and when, as a man of commerce and an unprovocative colonizer, he looked abroad, he tended to look eastward, to rich jungle-countries comparable with his own.

Thus, it may be interpolated, Western Pakistan has received mostly from the north and west, and has received constantly from those directions. In that historical fact is deeply rooted the individuality which has now expressed itself politically.

But that ultimate development lies outside our survey and our present point, which is the apparent intermittency and disconnection of the chequered story of Pakistan in the past. This, as in all such cases, is attributable in part to the congenital and incalculable opportunism of the human mind. If, however, as scientists intent upon methodical causality, we belittle this factor and seek a reasoned sequence, we are confronted at once with the need for a far

wider canvas than has here been available on which to paint our picture. Nothing is more impressive in the history of Asia than its *mobility*, than the vast spaces covered on the one hand by large concourses of people and on the other by small but determined and disruptive bands. The reasons behind this movement—climatic, geographical, social—need not now be discussed, but the fact remains. History has here ridden at a hand-gallop. Attempts which have been made to correlate early historic events in Western Europe with almost synchronous happenings in Central or even Eastern Asia are not altogether fantastic. It is certain that such correlation is essential to the coherent understanding of the history and archaeology of an integral part of Asia such as Western Pakistan. To achieve this, two things are necessary: an unrestricted perspective and, above all, a far more extensive and detailed study of the archaeological material than has yet been attempted. Many years of hard fieldwork and careful mapping lie ahead, both in Pakistan and in the adjacent regions of Asia, before the historic Personality of Western Pakistan can be adequately comprehended.

East Pakistan presents a different and in some sense a simpler problem. Cut off by climate and a vast and erratic river-system, it received only intermittently and, until Moghul times at any rate, developed largely in isolation. Whilst West Pakistan remained a thoroughfare or " melting-pot " of nations, East Pakistan, deep in its exclusive countryside, retained its own individuality from age to age with relatively minor adjustment. It remained essentially and obstinately provincial; and therein lies its special interest and its charm. Our difficulty does not there arise.

The second glaring gap in our knowledge is in some measure of another kind. Our brief record has largely (though not quite exclusively) concerned itself with Church and State. Particularly in the Islamic period, little has been said about the common man, the farmer, the craftsman, the merchant. While emperors were spending lakhs on tombs and pleasure-gardens, how lived the ordinary man ? What was the aspect of his town, his house, his homestead ? Of these important things we know little. Research into them has scarcely begun. Surviving materials may be few and not always spectacular, but they are not negligible. In the towns, notably Lahore, are still, after many vicissitudes, old houses, mostly of timber, which perpetuate the traditional craftsmanship of the housebuilder and traditional modes of living. It is impossible to fly over Pakistan without realizing the wealth of historic material relating to country-life that awaits the air-camera. In some districts the ancient mode seems to continue with little change. In others (as in the neighbourhood of Lahore) it has been regimented, but the old mode not infrequently shows through the new. Here is work to do, and well worth the doing. If some of our young university historians would desert for a while the high-level history of the conventional syllabus and would study the planning, carving and sociology of the little that is left of the dwellings of their own peasant or middle-class forebears, they would be attempting a cultural task of national importance. And, since most of these older buildings are of timber and are diminishing in numbers year by year, the task is not one which will suffer delay. This little book ends with a plea for the history and archaeology of the Common Man.

APPENDICES

APPENDIX A

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APPENDIX B

LIST OF MONUMENTS SCHEDULED UNDER THE ANCIENT MONUMENTS PRESERVATION ACT

Abbreviations

A.S.I.R. = Archaeological Survey of India Report, by A. Cunningham.
A.S.I.A.R. = Archaeological Survey of India, Annual Reports since 1902; Pt. II is referred to, unless otherwise stated.
J.A.S.B. = Journal of the (Royal) Asiatic Society of Bengal.
J.R.A.S. = Journal of the Royal Asiatic Society of Great Britain and Ireland.
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66. Ghāz Dheri, mound near Chārsada. As preceding.
67. Stūpa-mound known as Sudheran-jo Dhaḍo, at Saidpur. Hyderābād Dist., Sind. *A.S.I.A.R.* 1914-15, pp. 89-96.

68. Buddhist stūpa at Thul Mīr Rukan. Nawabshāh Dist., Sind. *A.S.I.A.R.* 1905-06, p. 6; 1929-30, p. 116; H. Cousens, *Antiquities of Sind* (Calcutta, 1929), pp. 98-9.
69. Sasuijo-Takar, town-site at Bambōr, near Ghāro, on the Ghāro creek. Karachi Dist., Sind. *A.S.I.A.R.* 1929-30, p. 110; H. Cousens, *Ant. of Sind*, pp. 80-1; *Prog. Rep. of the A.S.I. Western Circle*, 1919, p. 57.
70. Jam Bijar fort. As preceding.
71. Fort-mound known as the Kāfir Qil'ah, at Sehwān. Karachi Dist., Sind. H. Cousens, *Ant. of Sind*, pp 138-9; *Gaz. of Prov. of Sind.*, B IV, Larhana Dist., p. 39; A. Cunningham, *Anc. Geography of India* (Calcutta, 1924), pp. 302-6; *Prog. Rep. of the A.S.I. Western Circle*, 1919, p. 58.
72. Buddhist stūpa at Mohenjo-dāro. Larkāna Dist., Sind. J. Marshall, *Mohenjo-daro and the Indus Civilization* (London, 1931), I, pp. 113-16; *A.S.I.A.R.* 1922-23, pp. 102-3; 1924-25, pp. 63-4, 71; 1925-26, pp. 4, 75-6.
73. Buddhist monastery at Mahenjo-daro. As preceding.
74. Tower at Dhamraho. Larkāna Dist., Sind. *Prog. Rep. of the A.S.I. Western Circle*, 1920, p. 78.
75. Mounds at Dhamraho. Larkāna Dist., Sind. *A.S.I.A.R.* 1925-26, p. 99; *Prog. Rep.*, etc., 1921, p. 65.
76. Buddhist stūpa at Mīrpūr-Khās. Thar and Pārkar Dist., Sind. H. Cousens, *Ant. of Sind*, pp. 82-97; *Gaz. of Prov. of Sind* B. VI, Thar and Pārkar Dist., pp. 27-32; *A.S.I.A.R.* 1909-10, pp. 44, 80-92; 1916-17 (Pt. I), p. 14; 1927-28, p. 191; 1929-30, p. 116.
77. Temple I at Bhodeśar, near Nagar Pārkar. Thar and Pārkar Dist., Sind. H. Cousens, *Ant. of Sind*, p. 176; *Gaz.* as above, p. 25.
78. Temple II at Bhodeśar. As preceding.
79. Temple IV at Bhodeśar. As preceding.
80. Jain temple at Virāvah. As preceding.
81. Temple at Gorī, 14 miles N.W. of Virāvah. As preceding.
82. Tor Dheri, mound near Loralai, N. Baluchistan. *A.S.I.A.R.* 1927-28, p. 191; A. Stein, *Arch. Tour in Waziristan and N. Baluchistan*, pp. 64-70.
83. Losar Bāoli, well on Grand Trunk Road, 5 miles N. of Taxila.
84. Saidan Bāoli, well on Grand Trunk Road at Hatti, N.W.F.P.
85. Chitti Bāoli, well on the old Moghul highway between Hasan Abdal and Attock, N.W.F.P. *A.S.I.A.R.* 1926-27, p. 239; 1937-38 (Pt. I), p. 5.
86. Moghul tomb at Attock, N.W.F.P.
87. Qutb-ud-dīn Aibak's grave at Lahore, W. Punjab. Latif, pp. 13-14; *A.S.I.A.R.* 1916-17 (Pt. I), p. 3.
88. Rukn-i-'Alam's tomb at Multān, W. Punjab. *A.S.I.R.* V, pp. 132-4; C. J. Rodgers, *Revised List*, etc., pp. 15-16; *A.S.I.A.R.* 1911-12 (Pt. I), p. 5; J. Marshall in *Camb. Hist. of India* III, p. 598; Percy Brown, *Indian Architecture, Islamic Period*, pp. 31-2.
89. Shāms-i-Tabrīzī's tomb at Multān, W. Punjab. *A.S.I.R.* V, pp. 134-5; C. J. Rodgers, *Rev. List*, etc., p. 16; J. Marshall as above, p. 598; Percy Brown as above, p. 31.
90. Shāh Yūsuf Gardīzī's tomb at Multān, W. Punjab. C. J. Rodgers, *Rev. List*, etc., p. 15; J. Marshall as above; Percy Brown as above, p. 31; *Epigraphia Indo-Moslemica* 1927-28, pp. 7-8.
91. Tahar Khān Nahar's tomb at Sitpur. Muzaffargarh Dist., W. Punjab. C. J. Rodgers, *Rev. List*, etc., p. 17; *A.S.I.A.R.* 1914-15 (Pt. I), p. 3; 1915-16 (Pt. I), p. 3.
92. Tahar Khān Nahar's mosque. As preceding. *A.S.I.A.R.* 1936-37, pp. 9-10.
93. (Included in No. 65 above.)
94. Jām Nizāmu-d-dīn's tomb on Maklī hill, Tatta, Sind. H. Cousens, *Ant. of Sind*, pp. 114-16; Percy Brown, *Indian Architecture, Islamic Period*, p. 119.
95. Barādari on Maklī hill, Tatta. H. Cousens, *Ant. of Sind*, p. 119.
96. Katān Kot, fort 4 miles S.W. of Tatta. H. Cousens, pp. 122-3; *A.S.I.A.R.* 1929-30, p. 111; *Prog Rep. of A.S.I. Western Circle*, 1919, p. 58.
97. Domed tomb with stone pillars beside Mīrzā Jānī Beg's tomb on Maklī hill, Tatta.
98. Tomb on stone pillars N. of Jām Nizāmu-d-dīn's tomb on Maklī hill, Tatta.
99. Brick structure N. of Jām Nizāmu-d-dīn's tomb, said to be the hermitage of Shaikh Himād Jamālī.
100. Two tomb-pavilions on stone pillars S.W. of Jām Nizāmu-d-dīn's tomb.
101. Mubarak Khān's tomb on Maklī hill.
102. Brick building with broken dome N. of Mubarak Khān's tomb.

103. Tomb and compound-wall of yellow stone S. of Jām Nizāmu-d-dīn's tomb.
104. Tomb and enclosure S.W. of No. 103.
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106. Brick dome S. of No. 105.
107. Tomb and compound-wall of yellow stone S. of No. 106.
108. "Chaukandi" or stepped pyramidal grave between Landhi and Samro. Karachi Dist., Sind. H. Cousens, *Ant. of Sind*, pp. 164, 166; *Prog. Rep. of A.S.I. Western Circle*, 1920, p. 79.
109. Mosque with re-used marble pillars, at Bhodeśar. Thar and Pārkar Dist., Sind. H. Cousens, *Ant. of Sind*, p. 176; J. Burgess, *Lists of the Antiquarian Remains in the Bombay Presidency* (Bombay, 1885), p. 220; *Gaz. of Prov. of Sind* B VI, Thar and Pārkar Dist., p. 25.
110. Walled enclosure containing two tombs, one of which is commonly known as that of Lala Rukh, at Hasan Abdal. Attock Dist., N.W.F.P. *A.S.I.R.* II, p. 138; C. J. Rodgers, *Rev. List*, etc., p. 4; *A.S.I.A.R.* 1920-21, p. 3; 1921-22, p. 4; 1922-23, pp. 9-10.
111. Begam-ki-Sarāi, Moghul Sarāi at Attock, N.W.F.P. *A.S.I.A.R.* 1919-20, p. 3; 1928-29, pp. 24-5; 1929-30, p. 22; 1930-34 (Pt. I), p. 18; 1936-7, p. 10.
112. Hakim's tomb at Hasan Abdal. Attock Dist., N.W.F.P. *A.S.I.A.R.* 1919-20, p. 3; 1920-21, p. 3.
113. Moghul fort at Attock, N.W.F.P. C. J. Rodgers, *Rev. List*, etc., p. 6; *A.S.I.A.R.* 1926-27, pp. 120-22; H. N. Wright, *Cat. of Coins in the Indian Museum, Calcutta* (Oxford, 1908), p. xxxi.
114. Abdul Nabi's tomb at Kotli Maqbara. Gujranwala Dist., W. Punjab.
115. Akbari Bāoli, well at Gujrat, W. Punjab. C. J. Rodgers, *Rev. List*, etc., p. 14; *Punjab Dist. Gaz.* XXV A, Gujrat Dist., p. 15.
116. Shāhi Masjid at Chiniot. Jhang Dist., W. Punjab. C. J. Rodgers, *Rev. List*, etc., pp. 12-13; *A.S.I.A.R.* 1922-23, p. 9.
117. Shāh Burhan's tomb at Chiniot. As preceding.
118. Rohtās fort. Jhelum Dist., W. Punjab. C. J. Rodgers, *Rev. List*, etc., pp. 7-8; *Punjab Dist. Gaz.* XXVII A, Jhelum Dist., pp. 30, 34; *A.S.I.A.R.* 1921-22, p. 4; 1922-23, p. 10; A. Stein, *Arch. Reconnaissances in N.W. India and S.E. Iran*, p. 22.
119. 'Ali Mardān Khān's tomb and gateway at Lahore, W. Punjab. Latif, p. 152; *A.S.I.A.R.* 1916-17 (Pt. I), p. 3; 1923-24, pp. 15-16.
120. Saruwala Maqbara at Lahore. Latif, pp. 135-6; *A.S.I.A.R.* 1923-24, p. 15; J. P. Vogel, *Tile-Mosaics of the Lahore Fort* (Calcutta, 1929), p. 59.
121. Buddho's tomb at Lahore. Described as "the dome of Khān-i-Dauran" in Latif, pp. 151-2; *A.S.I.A.R.* 1919-20, p. 3; 1923-24, p. 14.
122. The Chauburji gateway at Lahore. Latif, pp. 138-190; C. J. Rodgers, *Rev. List*, etc., p. 27; *Punjab Dist. Gaz.* XXX A, Lahore Dist., p. 260; *A.S.I.A.R.* 1921-22, p. 3; 1923-24, p. 16; 1930-34 (Pt. I), p. 18.
123. The Gulabi Bāgh gateway at Lahore. Latif, pp. 134-5; *A.S.I.A.R.* 1923-24, pp. 14-15.
124. Dai Anga's tomb at Lahore. Latif, p. 135; *A.S.I.A.R.* 1920-21, p. 3.
125. Dai Anga's mosque at Lahore. Latif, pp. 163-4; *A.S.I.A.R.* 1903-04, p. 6; 1904-05, pp. 20-22.
126. The Shalimar Garden at Lahore. Latif, pp. 56, 140-4, 246-9; C. J. Rodgers, *Rev. List*, etc., p. 27; H. R. Goulding, *Old Lahore* (Lahore, 1924), pp. 5-6; *Punjab Dist. Gaz.* XXX A, Lahore Dist., pp. 259-60; *A.S.I.A.R.* 1917-18 (Pt. I), p. 2; 1918-19 (Pt. I), p. 3; 1921-22, p. 3; 1922-23, p. 11; 1923-24, p. 16; 1924-25, p. 16; 1925-26, p. 17; 1930-34 (Pt. I), p. 18; 1936-37, p. 11; 1937-38 (Pt. I), p. 4.
127. Tiled gateway and two bastions at Nawān Kot, Lahore. Latif, p. 190; *A.S.I.A.R.* 1928-29, p. 23; J. P Vogel, *Tile Mosaics*, etc., p. 58.
128 - 138. Lahore fort. Latif, pp. 119-128, 253; C. J. Rodgers, *Rev. List*, etc., p. 25; Kanahya Lal, *Tarikh-i-Lahore* (Lahore, 1884), pp. 345-7; *Punjab Dist. Gaz.* XXX A, Lahore Dist., pp. 253-6; J. P. Vogel, *Tile-Mosaics of the Lahore Fort*; Percy Brown, *Indian Architecture, the Islamic Period*, pp. 96, 105, 109; *A.S.I.A.R.* 1902-03, pp. 109-10, 218-224; 1903-04, pp. 5, 26-7; 1904-05, pp. 22-3; 1905-06, p. 2; 1906-07, p. 5; 1909-10, pp. 2, 3, 30, 33-9; 1911-12, (Pt. I), p. 4; 1914-15 (Pt. I), pp. 2-3; 1917-18 (Pt. I), p. 2; 1920-21, p. 3; 1924-25, pp. 15-16, 174, 176; 1925-26, pp. 17-19, 198-9; 1926-27, pp. 17-20, 243, 245; 1927-28, pp. 16-17, 196; 1928-29, pp. 18-23, 145, 146, 178; 1929-30, pp. 20-1, 202, 241; 1930-34 (Pt. I), pp. 16-17, 145-6; 1930-34, p. 281; 1934-35, pp. 10-11, 33, 84; 1935-36, pp. 11, 12, 127; 1936-37, pp. 8-9; 1937-38 (Pt. I), p. 2.

139. Kōs Minār at Shāhū-kī-Garhi, outside Lahore railway-station. *Ann. Prog. Rep. of the Superintendent, Mohammadan and British Monuments, Northern Circle*, 1914, p. 51.
140. Two Kōs Minārs at Minhola, near Lahore. As preceding.
141. Anarkali's tomb, Lahore. Latif, pp. 186-8; C. J. Rodgers, *Rev. List*, etc., p. 26; Kanahya Lal, *Tarikh-i-Lahore*, pp, 318-19; *Punjab Dist. Gaz.* XXX A, Lahore Dist., p. 260; *A.S.I.A.R.* 1925-26, p. 17; 1926-27, p. 17.
142. Bādshāhī Masjid, Lahore. Latif, pp. 113-16; Kanahya Lal, *Tarikh-i-Lahore*, pp. 141-5; C. J. Rodgers, *Rev List*, etc., p. 26; Percy Brown, *Indian Architecture, Islamic Period*, p. 114; *A.S.I.A.R.* 1913-14 (Pt. I), p. 3; 1925-26, p. 195; 1929-30, p. 241; 1935-36, pp. 12-13; 1936-37, p. 9.
143. Wazir Khān's mosque, Lahore. Latif, pp. 214-21; Kanahya Lal, *Tarikh-i-Lahore*, pp. 158-64; C. J. Rodgers, *Rev. List*, etc., p. 26; J. P. Vogel, *Tile-Mosaics*, etc., pp. 1, 4, 8-9, 12, 20, 57-8; Percy Brown, *Ind. Arch., Isl. Period*, pp. 109-10; *Punjab Dist. Gaz.* XXX A, Lahore Dist., pp. 257-8; *A.S.I.A.R.* 1903-04, pp. 5, 28; 1905-06, p. 1.
144. Mīrza Kamaran's Barādari at Shāhdara, near Lahore. Latif, p. 112; Kanahya Lal, *Tarikh-i-Lahore*, p. 374; *A.S.I.A.R.* 1925-26, p. 17; 1928-29, p. 24; 1936-37, p. 9.
145. The Roshnāi Gate, Lahore. Latif, p. 119; Kanahya Lal, *Tarikh-i-Lahore*, p. 346; *A.S.I.A.R.* 1927-28, pp. 91-2; 1934-35, p. 11; 1936-37, p. 9.
146. Tiled mosque at Begampura, Lahore. Latif, p. 138; Kanahya Lal, *Tarikh-i-Lahore*, pp. 280-1; J. P. Vogel, *Tile-Mosaics*, etc., p. 10.
147. Sher Shāh's Bāoli at Wan Bachran. Mianwali Dist., W. Punjab. *A.S.I.A.R.* 1929-30, pp. 134, 236, 239.
148. Daud Kirmāni's tomb at Shergarh. Montgomery Dist., W. Punjab. C. J. Rodgers, *Rev. List*, etc., p. 18; *A.S.I.A.R.* 1937-38 (Pt. I), p. 3.
149. Tomb of Shāh Ali Akbar's mother at Surah Miana. Multān Dist., W. Punjab.
150. Shāh Ali Akbar's tomb at Multān.
151. Sawi Masjid and graves at Multān. *A.S.I.A.R.* 1928,29, p. 25; 1935-36, pp. 13-14.
152. Tank and tower at Rakh Haran Minār. Gujranwala Dist., W. Punjab. Latif, p. 47; C. J. Rodgers, *Rev. List*, etc., p. 22; *Punjab Dist. Gaz.* XXIV A, Gujranwala Dist., p. 92; *A.S.I.A.R.* 1916-17 (Pt. I), p. 3; 1917-18 (Pt. I), pp. 2-3; 1918-19 (Pt. I), p. 4; 1919-20 (Pt. I), pp. 3-4; 1930-34 (Pt. I), p. 18; 1935-36, p. 15.
153. Jahāngīr's tomb at Shāhdara, near Lahore. Latif, pp. 104-7; C. J. Rodgers, *Rev. List*, etc., p. 26; Percy Brown, *Ind. Arch., Isl. Per.*, p. 103; *A.S.I.A.R.* 1905-06, p. 1; 1906-07, pp. 5, 12-14; 1907-08, p. 4; 1911-12 (Pt. I), p. 5; 1914-15 (Pt. I), p. 2; 1915-16 (Pt. I), p. 3; 1922-23, p. 10; 1928-29, p. 24; 1929-30, pp. 21-2; 1930-34 (Pt. I), p. 17; 1934-35, pp. 11-12; 1935-36, p. 14; 1936-37, p. 10; 1937-38 (Pt. I), p. 2; Kanahya Lal, *Tarikh-i-Lahore*, pp. 321-6; J. P. Vogel, *Tile-Mosaics*, etc., p. 58.
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155. Asaf Khān's tomb at Shāhdara, near Lahore. Latif, p. 108; Kanahya Lal, *Tarikh-i-Lahore*, pp. 327-30; J. P. Vogel, *Tile-Mosaics*, etc., pp. 10, 57; C. J. Rodgers, *Rev. List*, etc., p. 27; *A.S.I.A.R.* 1903-04, p. 27; 1919-20, p. 3; 1921-22, p. 3; 1922-23, p. 10; 1924-25, p. 16; 1925-26, p. 17; 1928-29, pp. 23-4.
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157. Fort at Hund. Mardān Dist., N.W.F.P. *A.S.I.A.R. Frontier Circle*, 1915-16, p. 40; *A.S.I.A.R.* 1923-24, pp. 68-70.
158. Ghulām Shāh Kalhōrah's tomb at Hyderābād, Sind. H. Cousens, *Ant. of Sind*, pp. 132-4; *Gaz. of Prov. of Sind* B, II, Hyderābād Dist., p. 38; *A.S.I.A.R.* 1919-20, pp. 9-10.
159. Nabī Khān's tomb at Hyderābād, Sind. H. Cousens, *Ant. of Sind*, p. 134; *Gaz. of Prov. of Sind* B, II, Hyderābād Dist., p. 38; *A.S.I.A.R.* (Pt. I), 1930-34, p. 26.
160. Sarafrāz Khān's tomb at Hyderābād, Sind. H. Cousens, *Ant. of Sind*, p. 134.
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162. Two enclosures containing tombs of the Tālpūr Mīrs at Hyderābād, Sind. N. Cousens, *Ant. of Sind*, p. 134; *Gaz. of Prov. of Sind*, B, II, Hyderābād Dist., pp. 37-9; *A.S.I.A.R.* 1926-27, p. 240; *Prog. Rep. of the A.S.I. Western Circle*, pp. 68-9.

163. Miān Nūr Moḥammad Kalhōrah's tomb, 7 miles N.E. of Daulatpūr. Nawabshāh Dist., Sind. H. Cousens, *Ant. of Sind*, p. 162; *Gaz. of Prov. of Sind* B, V, Nawabshāh Dist., p. 25.

164. Mīr Shāhadād's tomb at Shāhadādpūr. Nawabshāh Dist., Sind. *A.S.I.A.R.* 1928-29, p. 31.

165. Dabgir Mosque, Tatta, Sind. J. Burgess, *Lists of the Ant. Remains of the Bombay Pres.* (Bombay, 1885), p. 215; H. Cousens, *Ant. of Sind*, pp. 121-2.

166. Jāmi Masjid, Tatta, Sind. H. Cousens, *Ant. of Sind*, pp. 120-1; J. Burgess, *Lists*, etc., p. 215; Percy Brown, *Ind. Arch., Islam. Per.*, p. 119; *A.S.I.A.R.* 1918-19 (Pt. I), p. 6; 1935-36, pp. 20-1; 1936-37, p. 21.

167. Tomb of Sultān Moḥammad, son of Āmīr Hajika, wrongly known as the tomb of Nawāb Āmīr Khalil Khān, on the Maklī hill, Tatta, Sind.

168. Tomb of Mīrza 'Isā Tarkhān the younger, Maklī hill, Tatta, Sind. H. Cousens, *Ant. of Sind*, p. 118; J. Burgess, *Lists*, etc., p. 215; Percy Brown, *Ind. Arch., Islam. Per.*, p. 219; *A.S.I.A.R.* 1918-19 (Pt. I), p. 6; 1936-37, p. 21.

169. Brick enclosure and grave of Mīrzā Bāga Khān, Maklī hill, Tatta, Sind. H. Cousens, *Ant. of Sind*, p. 119; J. Burgess, *Lists*, etc., p. 214.

170. Dīwān Shurfa Khān's tomb, Maklī hill, Tatta, Sind. H. Cousens, *Ant. of Sind*, pp. 117-18; J. Burgess, *Lists*, etc., p. 215; *A.S.I.A.R.* 1935-36, pp. 20-1.

171. Mīrzā Tugral Beg's tomb, Maklī hill, Tatta, Sind. H. Cousens, *Ant. of Sind*, p. 119; J. Burgess, *Lists*, etc., p. 215.

172. Mīrzā Jānī Beg and Ghāzī Beg's tomb, Maklī hill, Tatta, Sind. H. Cousens, *Ant. of Sind*, pp. 119-20; J. Burgess, *Lists*, etc., pp. 214-15.

173. Stone enclosure containing the graves of Mīrzā Jānī Baba and 12 others of the Tarkhān family, wrongly called the graves of Mīrzā 'Isā Tarkhān's zanānah. H. Cousens, *Ant. of Sind*, pp. 118-19; *A.S.I.A.R.* 1914-15 (Pt. I), p. 9.

174. Mīrzā Moḥammad Bāqa Tarkhān's tomb, wrongly called Mīrzā 'Isā Khān's tomb, Maklī hill, Tatta, Sind. H. Cousens, *Ant. of Sind*, p. 116; J. Burgess, *Lists*, etc., p. 214.

175. Brick mosque and enclosure near Shurfa Khān's tomb, supposed to be the tomb of Mīr Abu-l-Bāqa, Makli hill, Tatta, Sind. H. Cousens, *Ant. of Sind*, p. 117.

176. Brick domed tomb wrongly ascribed to Nawāb Āmīr Khalīl Khān, Maklī hill, Tattā, Sind. H. Cousens, *Ant. of Sind*, pp. 116-17; J. Burgess, *Lists*, etc., p. 214.

177. Stone tomb with enclosure S. of preceding.

178. Stone enclosure N.E. of No. 174 containing, among others, the tomb of the elder Mīrzā 'Isā Tarkhān. H. Cousens, *Ant. of Sind*, p. 116.

179. Brick tomb near the tomb of Aulia Pīr, Maklī hill, Tatta, Sind.

180. Yār Moḥammad Kalhōra's tomb at Khudābād, by the railway between Sehwān and Dādū. Tatta Dist., Sind. H. Cousens, *Ant. of Sind*, p. 162.

181 Jāmi Masjid at Khudābād, as preceding. *A.S.I.A.R.* 1920-21, p. 10.

182. Shāh Bahāro's tomb at Larkāna, Sind. H. Cousens, *Ant. of Sind*, pp. 159-160; J. Burgess, *Lists*, etc., p. 216; *Gaz. of Prov. of Sind*, IV, Larkāna Dist., pp. 33-5.

183. Mīr Ma 'sūm's Minār at Sukkur, Sind. H. Cousens, *Ant. of Sind*, pp. 150-2; J. Burgess, *Lists*, etc., p. 216; *Gaz. of Prov. of Sind* III, Sukkur Dist., pp. 48-9.

184. Barādari in Sheronwala Garden at Gujranwala, W. Punjab. C. J. Rodgers, *Rev. List*, etc., p. 21: *Punjab Dist. Gaz.* XXIV A, Gujranwala Dist., p. 342.

185. Hazuri Bāgh and Barādari, Lahore, W. Punjab. Latif, p. 118; Kanahya Lal, *Tarikh-i-Lahore*, pp. 347-9; C. J. Rodgers, *Rev. List*, etc., p. 25; *A.S.I.A.R.* 1906-07, p. 5; 1927-28, pp. 91-2; 1930-34 (Pt. I), p. 18; 1934-35, p. 11; 1935-36, p. 13; 1936-37, p. 9; 1937-38 (Pt. I), p. 2.

186. Samadh of Rangit Singh, Kharak Singh and Nao Nihal Singh, Lahore. Latif, pp. 129-130; Kanahya Lal, *Tarikh-i-Lahore*, pp. 220-6; *Punj. Dist. Gaz.* XXX A, Lahore Dist., p. 257.

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